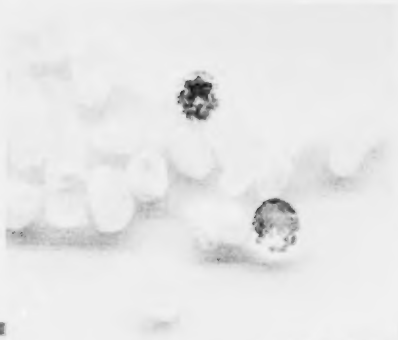

Photo: P. FitzMaurice

COMMUNITIES AND DIAMONDS

Socio-economic Impacts
in the Communities of Behchokǫ̀,
Gamèti, Whatì, Wekweètì, Dettah,
Ndilǫ, Łutselk'e, and Yellowknife

Photo: L. Leong

2006 Annual Report of the Government of the Northwest Territories under the BHP Billiton, Diavik and De Beers Socio-economic Agreements

Northwest Territories

PREPARED BY:
HEALTH AND SOCIAL SERVICES
EDUCATION, CULTURE AND EMPLOYMENT
FINANCE
INDUSTRY, TOURISM AND INVESTMENT
JUSTICE
NWT BUREAU OF STATISTICS
NWT HOUSING CORPORATION

August 2007

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Communities and Diamonds

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Behchokǫ̀, Gameti̓, Whati, Wekweèti, Dettah, Ndilo, Łutselk'e,
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Table of Contents

OPENING NOTES

1. Introduction
   - Method 5
   - Data 5
   - Socio-Economic Agreement Indicators 6
   - Trends Tables 7
   - Spatial Boundaries 8

COMMUNITY, FAMILY & INDIVIDUAL WELL-BEING TRENDS

2. Individual Well-being
   - Potential Years of Life Lost 10
   - Injuries 12
   - Suicides 14
   - Communicable Diseases 16

3. Family & Community Well-being
   - Teen Births 18
   - Single-Parent Families 20
   - Children Receiving Services 22
   - Family Violence 24

4. Crime
   - Total Police-Reported Crimes 26
   - Violent Crimes 28
   - Property Crimes 30
   - Federal Statute Crimes 32
   - Other Crimes – Traffic Offences 34
   - Other Criminal Code Offences 36

5. Housing
   - Ownership 38
   - Crowding 40
   - Core Need 42
   - Vacancies 44

CULTURAL WELL-BEING & TRADITIONAL ECONOMY TRENDS

6. Cultural Well-Being & Traditional Economy
   - Home-Language Use to Mother Tongue 46
   - Workforce-Aged Group Engaged in Traditional Activities 48

NON-TRADITIONAL ECONOMY TRENDS

7. Income & Employment
   - Average Income 52
   - Proportion of High-Income Earners 54
   - Income Assistance Cases 56
   - Employment Rate 58
   - Unemployment Rate 60
   - Participation Rate 62

8. Education
   - High School Completion 64
   - Less Than Grade 9 66

9. Business 68

NET EFFECT ON GOVERNMENT TRENDS

10. Net Effect on Government 70

SUSTAINABLE DEVELOPMENT TRENDS

11. Secondary Industry 72

CLOSING

12. Summary of Observed Trends 74

13. Summary of Findings 76

Appendices

Appendix A – Glossary of Words Used
Appendix B – Company Predictions
Appendix C – History of Events
Appendix D – Data Tables

1. Introduction

The Government of the Northwest Territories (GNWT) issues the Community and Diamonds Report (Report) once a year. The Report is requi ed by each GNWT socio-economic agreement (SEA). The GNWT has SEAs with BHP[1], Diavik, and De Beers.

SEAs are follow-up programs to environmental assessments. Follow-up programs are used to check if predictions made during an assessment were right. In the Report, we look at what was predicted in the BHP Environmental Impact Statement and in the Diavik and De Beers Environmental Assessment Reports (EARs). We then compare the trends we see in the communities around the mine to those trends predicted in the EAR for the mine.

1.1 Method

Through its SEAs, the GNWT has set up an industrial monitoring program. This helps us understand and prepare for the effects of large projects. The program uses both objective and subjective indicators. Information comes from administrative databases and from surveys. Where possible, the subjective indicators that we use are also used in territorial or national surveys. This lets us compare trends in the Local Study Area with national and territorial trends.

We can also look at changes in a data series to understand events that affect the trends we see.

The program allows for 'control' by looking at different population groups. We can see that changes occur at different rates for different groups. This helps to separate natural changes from those changes that seem to follow industrial development.

1.2 Data

GNWT departments report data once a year where it is possible. The NWT Bureau of Statistics carries out a Community Survey every five years. The most recent was in 2004, which put together the NWT Housing Needs and the NWT Labour Force surveys. Bureau surveys try to record what issues are important to communities. Sometimes the Bureau carries out extra surveys, such as the 2005 Community Impact Survey.

Statistics Canada does a Canadian Population Census every five years. It issued the last census in 2001. It issues other data as well, at different times.

[1] In May 2001, BHP merged with Billiton Plc to become BHP Billiton. As BHP signed the SEA, when referring to the SEA this Report uses BHP. When referring to events after May 2001 this Report uses BHP Billiton (BHPB). For more information, please see http://ekati.bhpbilliton.com/repository/aboutMine/history.asp.

1.3 Socio-economic Agreement Indicators

BHP	DIAVIK	DE BEERS
Community, Family & Individual Well-being		
number of potential years of life lost		
number of injuries	age-standardized injuries	age-standardized injuries
number of suicides		
number of communicable diseases	communicable diseases (sexually-transmitted diseases[2], tuberculosis)	communicable diseases (sexually-transmitted infections, tuberculosis)
number of teen births		
	single-parent families (also referred to as lone-parent families)	lone-parent families
number of children in care[3]	children in care[3]	children in care[3]
number of complaints of family violence	number of women and children referred to shelters	number of women and children referred to shelters
number of alcohol- and drug-related crimes	police-reported crimes, according to the following categories: violent, property, drug-related, other	police-reported crimes, according to the following categories: violent, property, drug-related, other
number of property crimes		
housing indicators		
Cultural Well-being & Traditional Economy		
	ratio of home-language use to mother tongue, by major age groups	ratio of home-language use to mother tongue, by major age groups
	percentage of workforce-aged group engaged in traditional activities	percent of workforce-aged group engaged in traditional activities

[2] Now called 'sexually-transmitted infections'
[3] Now called '*children receiving services*'.

BHP	DIAVIK	DE BEERS
Non-traditional Economy		
average income of residents	average income	average income
	proportion of high income earners	proportion of high income earners
number of social assistance cases[4]	social assistance cases[4]	income support cases[4]
employment levels and participation	employment	employment
	participation rate	employment participation rate
high school completion	number of people 15 years and older with less than Grade 9	number of people 15 years and older with less than Grade 9
	number of people 15 years and older with a high school diploma	number of people 15 years and older with a high school diploma
	registered businesses, bankruptcies and start-ups	registered businesses, bankruptcies and start-ups
Net Effect on Government		
	net effects on government of the project	
Sustainable Development		
	secondary industry data and initiatives	

1.4 Trends Tables

In each Observation section for each indicator, a Trends Table gives a picture of the effects of mine activity expected in the BHP EIS, and the Diavik and De Beers EARs. The table also sums up the trend observed by the GNWT for Small Local Communities and Yellowknife. Down arrows (🡻) and up arrows (🡹) show the predicted or observed direction of change. These trends are from the start of the first diamond project in 1997. A dash (—) means there is no trend, no predictions were made, or the predictions that were made by the three companies were not consistent with each other.

[4] Now called *income assistance cases*.

1.5 Spatial Boundaries

This report looks at indicators in Yellowknife and seven Small Local Communities[5]:

- Behchokö
- Detah
- Gamètì
- Lutsel K'e
- Ndilo
- Wekweètì
- Whatì.

These were part of the 'local study area' in the BHP, Diavik and De Beers environmental assessments. For comparison, we show data for Remaining NWT Communities and for Canada when possible. Rates in this Report are based on the NWT populations shown in Table 1 in Appendix D.

West Kitikmeot, in Nunavut, was also part of the local study area in the BHP and Diavik assessments. That region is not included in this Report, as it is outside GNWT boundaries.

The next page shows a Map of the Northwest Territories.

[5] Some community names have changed since 1990. Their names were formerly: Rae Edzo (Behchokö); Rae Lakes (Gamèti); Snowdrift (Łutsel K'e); Snare Lake (Wekweèti); and Lac La Martre (Whati).

Source: Industry, Tourism and Investment Administrative File.

COMMUNITY, FAMILY & INDIVIDUAL WELL-BEING

2 Individual Well-being

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 1.

2.1 Potential Years of Life Lost

Potential Years of Life Lost (PYLL) indicates early death. Often this can be avoided. PYLL is a useful measure of health, well-being, and lifestyle choice.

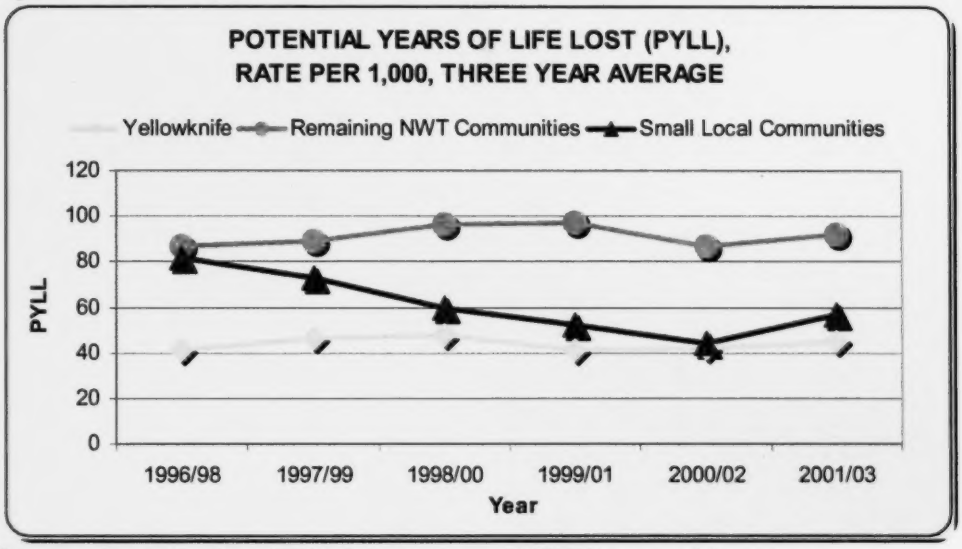
We work out PYLL based on an average lifespan of 75. Then we subtract from 75 the age at which a person dies. For example, if someone dies at age 50, the PYLL for that person is 25 years (75-50=25). By adding all the years of life lost through early death in one year, we get the PYLL for a community. Because of large changes in rates from one year to the next, we report PYLL as a three-year average rate per 1,000 people.

2.1.1 Observations

The PYLL rate in Small Local Communities has gone down a little since 1996. Almost no change is noted in Yellowknife and the Remaining NWT Communities.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	↓	—
De Beers	↓		

Figure 1: Potential Years of Life Lost



Source: Statistics Canada Vital Statistics and NWT Bureau of Statistics.

2.1.2 Analysis

It is possible that the PYLL rate in Small Local Communities has gone down because of a better standard of living or better health services. It could also be due to better access to health services.

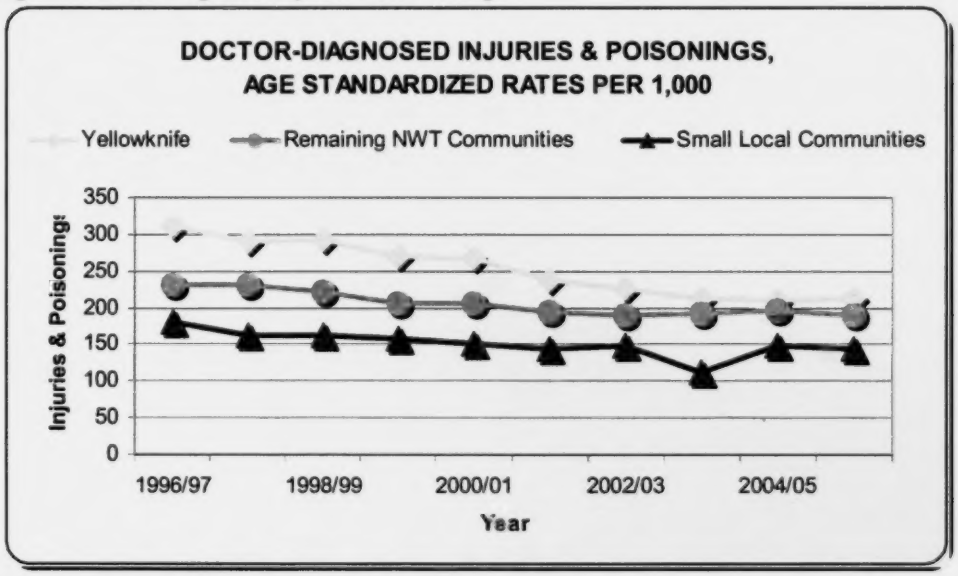
2.2 Injuries

Injuries tell us if more reckless behaviour or violence is taking place. These may follow rapid changes in the industry. Injuries include major trauma (broken bones, severe burns, accidental or intentional death), minor wounds (cuts, scrapes and bruises), and poisonings. Numbers show diagnosed injuries, not the number of people. [6] One person can have many injury diagnoses in a year.

The Report shows age-standardized injuries. This lets us compare communities that have different age groups or ages that change over time. For example, one community may have more young people than another. Young people tend to have more injuries than older people. If we do not adjust rates for age, we might get a false idea.[7]

2.2.1 Observations

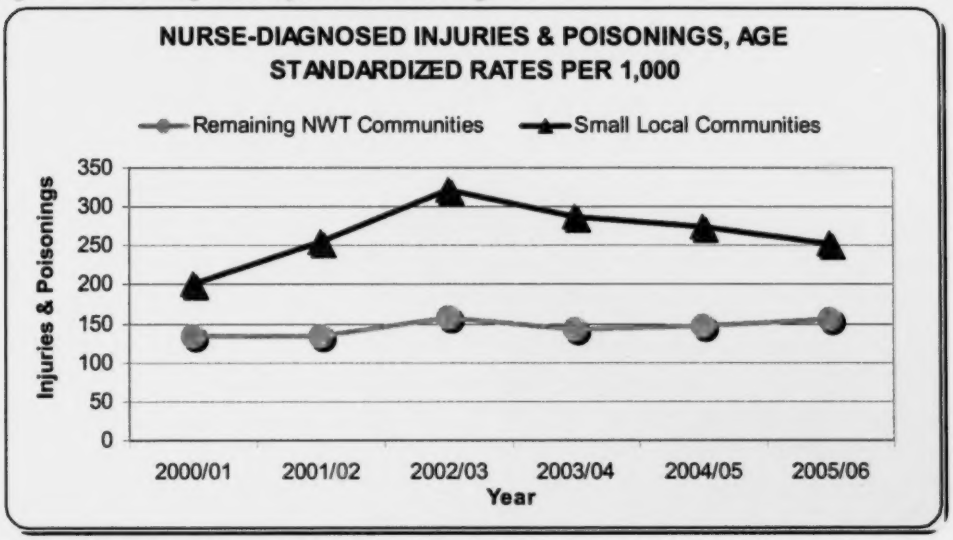
Figure 2: Doctor-Diagnosed Injuries and Poisonings



Source: NWT Health and Social Services Medicare and NWT Bureau of Statistics.

[6] For more information on data limitations surrounding doctor-diagnosed injuries, see Data Tables attached.
[7] For more information on age-standardization, see NWT Department of Health and Social Services, *Report to the Residents of the Northwest Territories on Comparable Health and Health System Indicators, 2004*, p. 3.

Figure 3: Nurse-Diagnosed Injuries and Poisonings[8]



Source: NWT Health and Social Services Health Suite and NWT Bureau of Statistics.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑	—	↓
Diavik	↑		
De Beers	↓		

Doctors are seeing fewer injuries throughout the NWT. We see this trend most clearly in Yellowknife. Outside Yellowknife, nurses diagnose most injuries.

The way nurses record injuries changed in 2000. Data recorded before 2000 cannot be compared to data that are more recent. It seems injuries in Small Local Communities are starting to go down.

2.2.2 Analysis

The downward long-term trend in Yellowknife may be due to the success of injury prevention efforts.

[8] Because most "Injuries and Poisonings" in Yellowknife are diagnosed by Doctors, no data for Yellowknife are reported in this graph.

2.3 Suicides

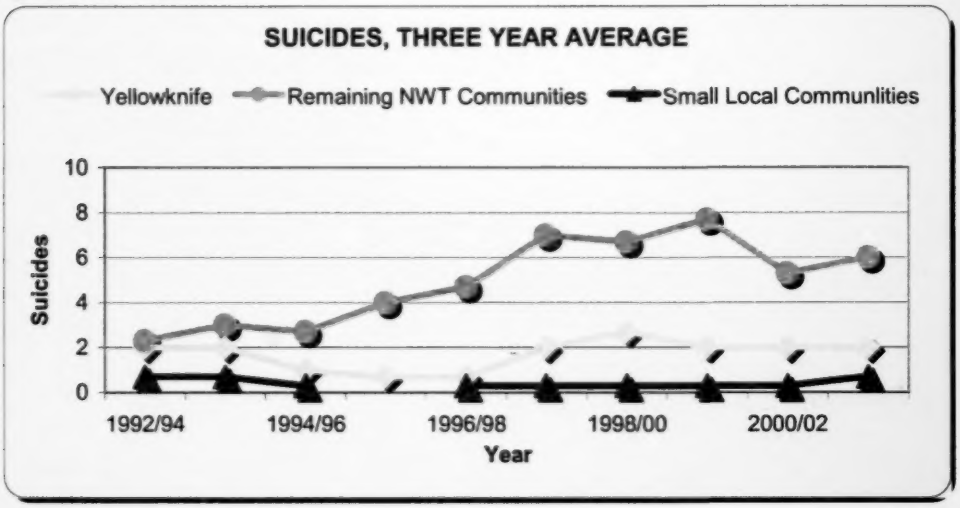
We report suicides because there is a link between these and social issues. We often see suicide with mental health problems such as depression. We also see suicide with social issues such as separation from a spouse, substance abuse and dependencies.

This data only takes into account deaths that are recorded as suicide. Three-year averages smooth out the year-to-year variations seen with small numbers. However, readers should view these with caution. There may be only two or three suicides in a given three-year period. This makes it hard to judge trends.

2.3.1 Observations

The number of suicides in the NWT has gone up. The rate of suicide also changed from 1996/98 to 2001/03. The rate went from 1.4 suicides per ten thousand people to 2.1. This was in large part because of more suicides in Remaining NWT communities. Small Local Community rates are stable.

Figure 4: NWT Suicides



Source: Statistics Canada Vital Statistics.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	—	—	—
Diavik	—		
De Beers	↑		

2.3.2 Analysis

The small number of suicides makes it hard to define trends or determine possible implications.

2.4 Communicable Diseases

SEXUALLY TRANSMITTED INFECTIONS

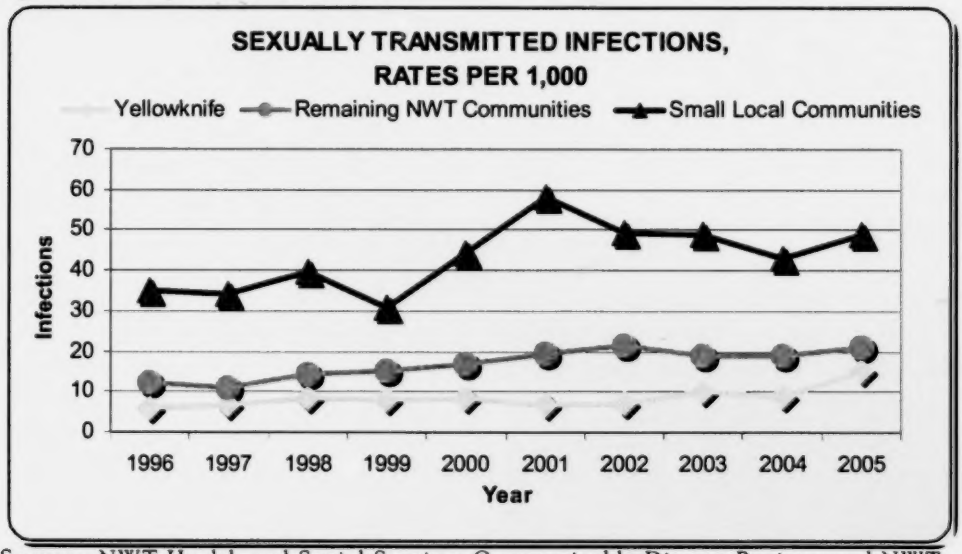
Sexually transmitted infections (STIs), such as chlamydia and gonorrhoea, can affect the health and well-being of people living in the North. An STI can also make it hard to have children. Risky actions can increase the chance of getting an STI.

2.4.1 Observations

The rate of STIs overall, and for youth aged 15-24, has gone up in Small Local Communities and Yellowknife. The STI problem is not limited to Small Local Communities.

Small Local Communities saw a major increase in the number of STIs after 1999.

Figure 5: Sexually Transmitted Infections



Source: NWT Health and Social Services Communicable Disease Registry and NWT Bureau of Statistics.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	—	↑	↑
Diavik	↑		
De Beers	↑		

2.4.2 Analysis

Increases in STIs may be due to a number of factors. Some of these factors could include:

- Reduced supervision by parents because of work schedules for mine jobs;
- Alcohol and drug abuse (higher incomes);
- General disregard for safe sex.

TUBERCULOSIS

Some groups are more at risk to get tuberculosis (TB), such as immigrants, Aboriginal people, and people infected with HIV. There are few TB cases in the NWT.

Since a TB outbreak can distort numbers from one year to the next, as was the case in the mid-1990s, this Report does not show TB data. Readers can see case numbers in the tables attached to this report.

3 Family & Community Well-being

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 2.

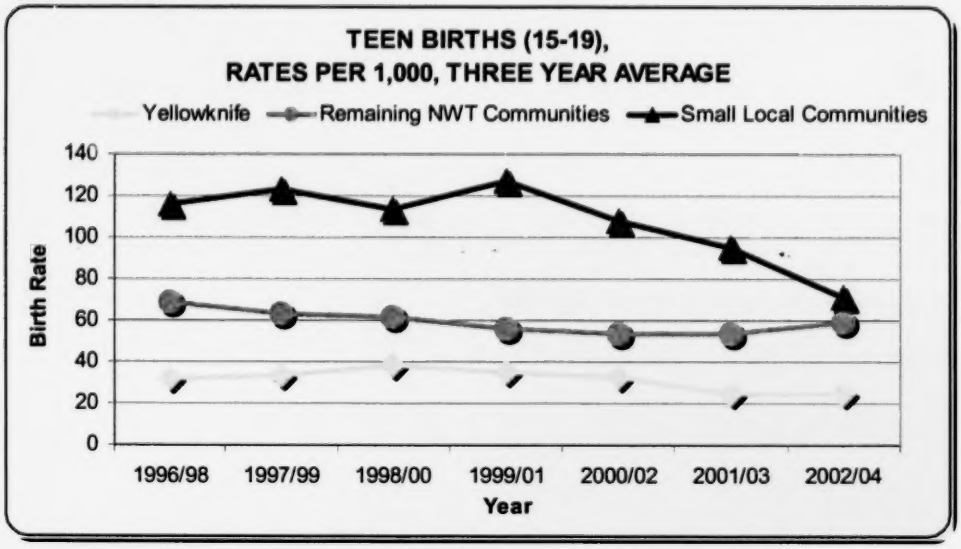
3.1 Teen Births

The teen birth rate is included because employment-induced in-migration and transients can add to unwanted pregnancies.[9] Teen births may also point to mothers who are under stress due to possibly unplanned pregnancies. Some teen mothers may not be mature enough for the demands of raising a child. Stress and lack of maturity may affect the well-being of both the child and parents in a bad way. In addition, teen parents are more likely to be single parents than older parents are.

3.1.1 Observations

The teen birth rate has not changed much in Yellowknife. It has dropped slightly in Small Local Communities, with some fluctuation.

Figure 6: Teen Births



Source: Statistics Canada Vital Statistics.

[9] Diavik SEER, Vol. 7.4.1.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	—		
Diavik	—	↓	—
De Beers	↑		

3.1.2 Analysis

The decrease in the teen birth rate may be due to a number of reasons. More planned parenting, delayed childbirth, or more use of birth control would all lead to a drop in the rate.

A continued drop in the number of teen births will reduce stress on services for teen mothers. Another reason could be that more teens are pursuing education. As more teens are able to join the work force upon finishing their schooling, there could be a growth in the number of young women working.

3.2 Single-parent Families

A parent with no spouse or common-law partner living with them to help raise his or her children faces many challenges. These families tend to have lower social and economic status than two-parent families. Stress is higher in children coming from single-parent families than in those from two-parent families. Single parents often have a more negative view of their own health status.[10]

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 2.1.

3.2.1 Observations

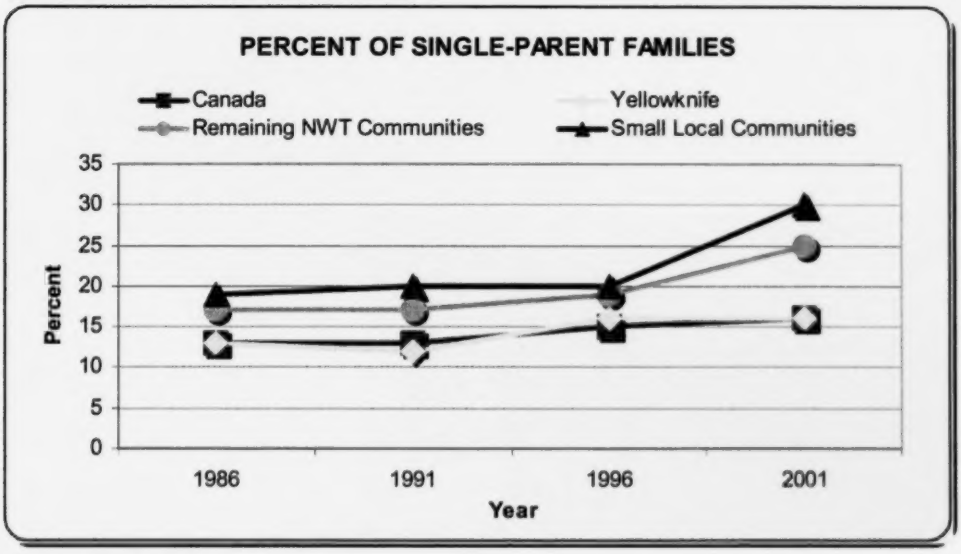
Since 1991, the biggest change in single-parent families was in Small Local Communities. This was between the years 1996 and 2001. There was an increase of 258 single-parent families, or 10 percent, during this time. Remaining NWT Communities went up by only 6.2 percent. Yellowknife and Canada went up 2 percent and 1 percent, in that order.

The number of children living in families with a low-income is related to families with one parent. The low-income measure (LIM) is a national measure of low income adjusted for family size. While the LIM does not account for higher living costs in the North, it still can measure poverty here. Overall, in the NWT, the number of children living in low-income families was about the same as the rest of Canada in 2002. This was about 23 percent.

Families that have one parent are more often in a low-income home. In 2003, 44 percent of children in the NWT who lived in single-parent families lived in low-income homes. For children in two-parent families, this percent was only 11 percent. About 37 percent of children in Yellowknife lived in low-income single-parent families. 50 percent of children in Small Local Communities lived in low-income homes. These percents have not changed much since 1997.

[10] NWT Health Status Report, GNWT 1999, page 59.

Figure 7: Percent of Single-parent Families



Source: Statistics Canada Census.

3.2.2 Analysis

More single-parent families in Small Local Communities points to additional factors at work. These could include rotation schedules or one partner living out of the house in the hope of finding work.

Having more single-parent families could affect the NWT economy and its ability to grow. This could happen if, for example, parents do not have access to daycare and are unable to work. Single-parent families may also need more services and support.

3.3 Children Receiving Services

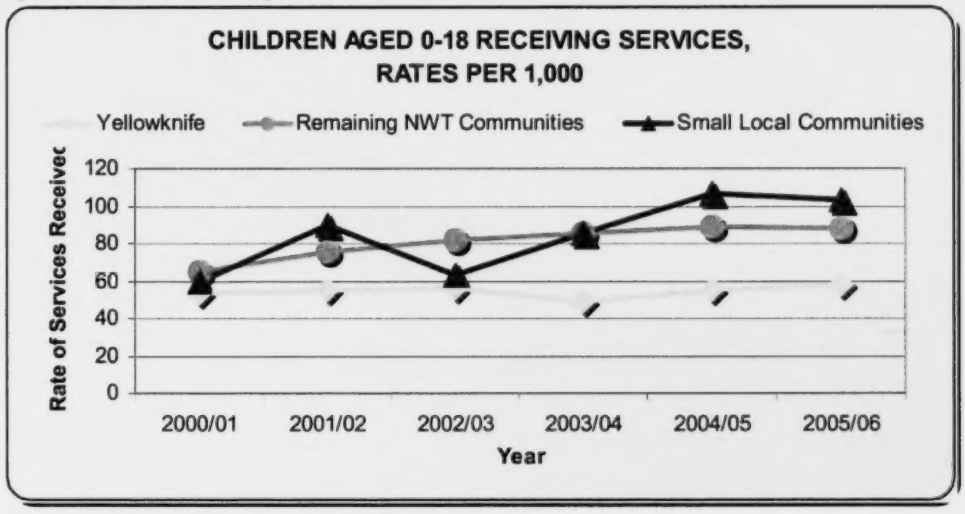
The first six years of life affect how a child will develop into an adult. Children who do not grow up in safe environments are at a disadvantage. Children with problems resulting from parent abuse or neglect are also disadvantaged. The number of children removed from their parents or guardians, or receiving services in their own homes, may be one measure of children at risk.

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 2.2.

3.3.1 Observations

In 1998, the *Child and Family Services Act* created a new option for children at risk. Now a child welfare worker can work with the child and the family in the home, to develop a 'plan of care' agreement. Introducing the plan of care option made the number of children receiving services go up. The number of cases has been increasing since then.

Figure 8: Children Receiving Services



Source: NWT Health and Social Services Child and Family Information System (CFIS) and NWT Bureau of Statistics.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	↑	—
De Beers	—		

3.3.2 Analysis

Changes in the *Act* have affected the number of cases reported. Changes in staff can also affect the number of children receiving help. Public and staff awareness may affect reporting, as well.

3.4 Family Violence

Family violence is a serious problem in the NWT, but it is hard to measure. Someone is usually abused many times before asking for help from the RCMP. Therefore, the number of cases reported to the police does not reflect the amount of family violence that takes place.

Most family violence does not result in women and children going to a shelter right away. Most NWT communities do not have shelters. This report shows admissions data at the territorial level.

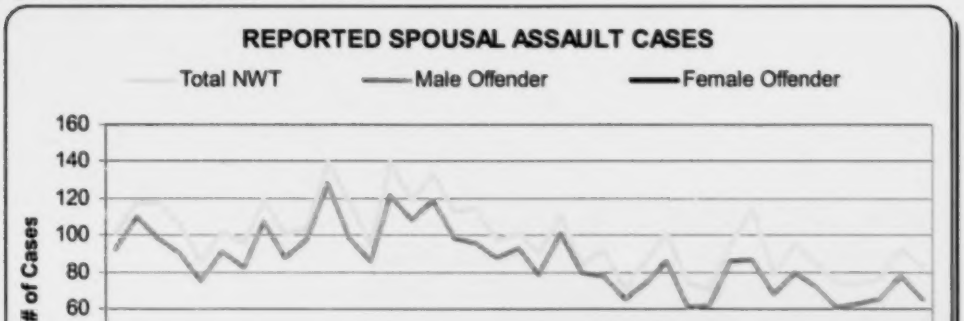
BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 2.3.

3.4.1 Observations

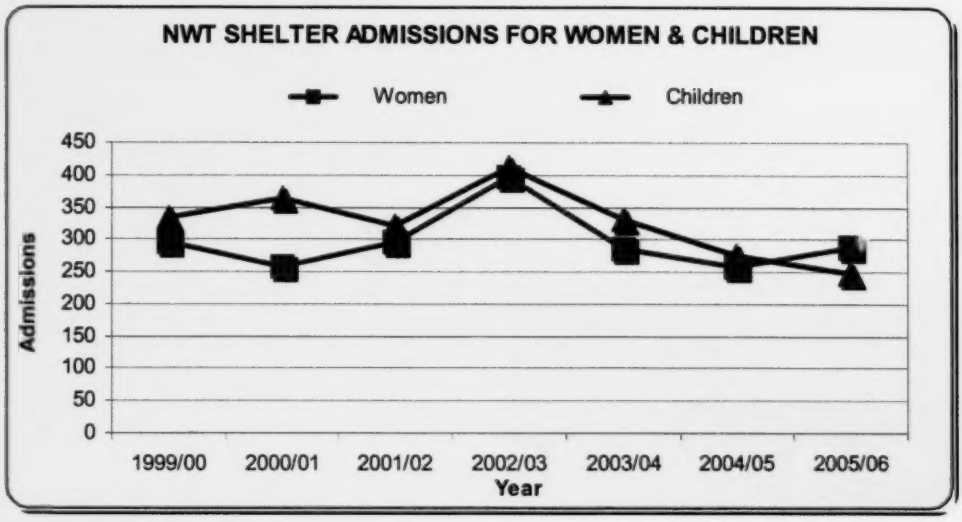
Reported spousal assault cases in the NWT have gone down since 1999. Small peaks of cases occurred in the first quarter of 2001 and the third quarters of 2002 and 2003. Seasonal effect is one of many reasons that may cause the small peaks.

Shelter admissions over the past six years have mostly stayed the same. Overall, the number of spousal assault complaints to the RCMP seems to be going down. However, family violence in the NWT is still very high. The number of women and children referred to shelters does not capture some women who do not access the shelters.

Figure 9: Reported Spousal Assault Cases



Source: RCMP UCR Statistics System.
Figure 10: Admission of Women and Children to NWT Shelters



Source: NWT Health and Social Services Family Violence Shelter Reports.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	—	—
De Beers	↑		

In 2005, the new *Protection Against Family Violence Act* created 'emergency protection orders'. These orders are a measure of family violence. In the first year of the *Act*, there were 116 requests for orders.

The GNWT implemented this *Act* to offer victims of violence easier access to protection from abuse and harm. Front-line workers and non-government organizations in small communities initially flagged the need for this kind of protection.

3.4.2 Analysis

Alcohol abuse adds to family violence. While alcohol does not cause family violence, much of the violent crimes that occur in families are increased by alcohol abuse.

Less family violence can mean improved personal, family and community well-being. Less family violence can lead to greater choice. It can lead to more people taking part in community life and less stress on services.

4 Crime

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 3.

4.1 Total Police-reported Crimes

Total police-reported crimes in the NWT include property, violent and other Criminal Code offences. They exclude traffic offences. Crimes are reported based on the most serious offence, except for violent offences, where each crime reflects one victim.

This data gives a general look at the number of Criminal Code crimes in the NWT. It does not show changes in the seriousness of crimes being committed. Changes in RCMP activities, resources, and reporting can influence these numbers.

4.1.1 Observations

The crime rate in Yellowknife has been going up since 2000. A large reason is that there was a change in RCMP reporting. Crimes recorded as territorial offences in the past – mostly mischief, or being drunk in a public place – are now Criminal Code crimes. However, since 2002 there has been a steady rise in actual crime. A similar change in reporting took place between 2000 and 2002 in all Remaining NWT communities.

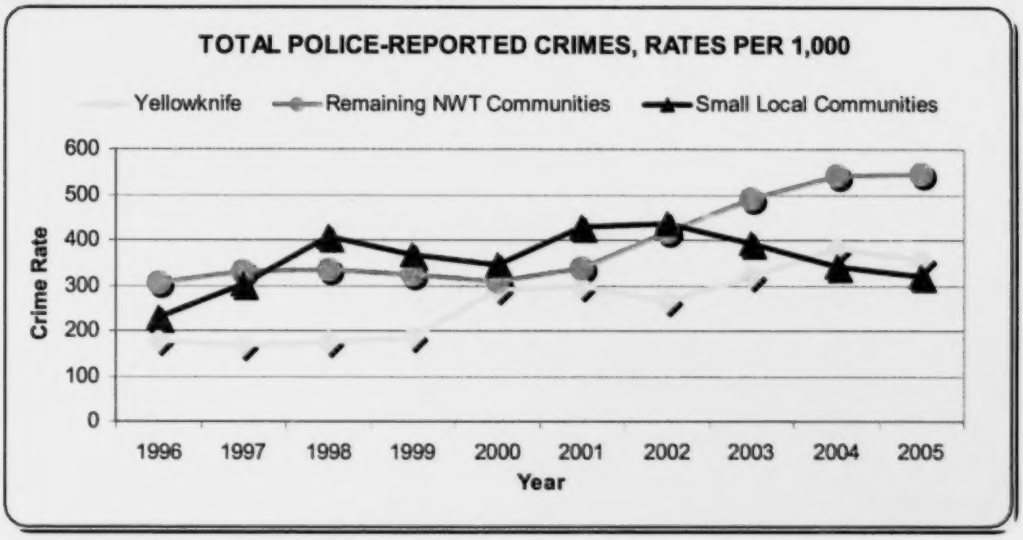
Yellowknife and the Remaining NWT Communities show an increase in total crime. Since 2002, crimes in Small Local Communities have been going down each year.

The number of youth charged has gone up and down over time. This trend is similar to years before 1996. Changes to the justice system may have lowered the total number of youth charged. However, there have been two sharp increases of youth charged in the Small Local Communities. The Diavik Communities Advisory Board (DCAB) suggests that youth in Small Local Communities are not doing well. DCAB states they are involved in high-risk behaviours, including criminal activity.[11]

[11] DCAB (Diavik Communities Advisory Board), Annual Report 2004-05, page 12.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	—	↑
De Beers	↑		

Figure 11: Number of Total Police-reported Crimes



Source: RCMP UCR Statistics System.

4.1.2 Analysis

The trend in Yellowknife could be linked to resource development.

The drop in crime in Small Local Communities could be connected to more crime prevention activities. It could also reflect the 2-year period predicted by Diavik, which can be found in Appendix B, Section 3. Diavik thought there would be less demand on protection services after adjustments were made to rotational work and linked absences.

The growth in crime in Yellowknife can be linked to more substance abuse. An increase in substance abuse could be due to higher income. A similar growth is seen in the Remaining NWT Communities. This may be linked to resource development in that area.

The cause of the spikes in Youth Charged in Small Local Communities is unknown.

4.2 Violent Crimes

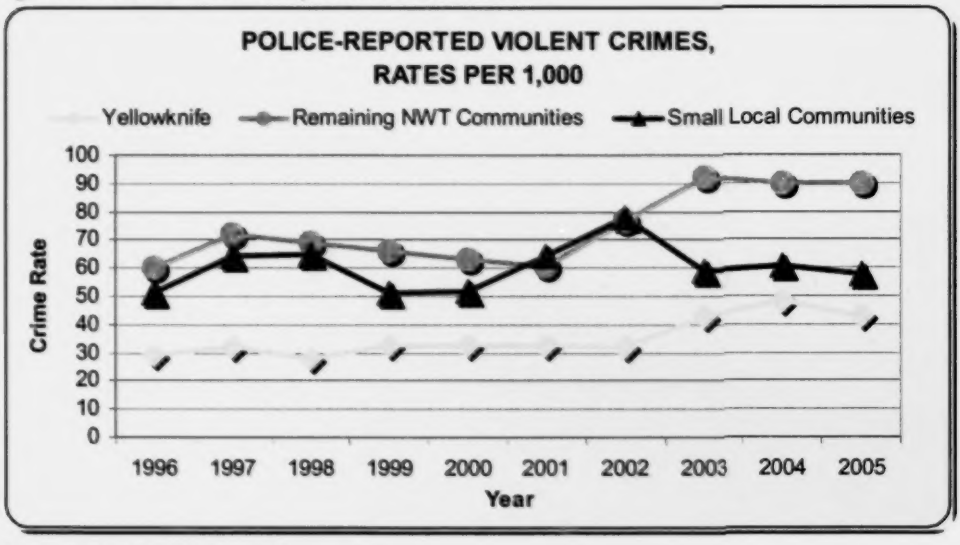
Violent crimes include:

- homicide;
- attempted murder;
- assault;
- sexual assault;
- other assaults;
- other sexual offences;
- abduction;
- robbery.

4.2.1 Observations

Since 1996, data does not show any trend in violent crimes for Small Local Communities. The national trends have not changed since 1999, either. However, the NWT violent crime rate is now at its highest since 1996. This is mostly because of increases in Yellowknife and Remaining NWT Communities.

Figure 12: Number of Police-reported Crimes of Violence



Source: RCMP UCR Statistics System.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	—	↑
De Beers	↑		

4.2.2 Analysis

Violent crime can be linked to alcohol and drug use. For example, an argument is more likely to become violent if one or more people involved are under the influence of alcohol or drugs. Greater drug and alcohol abuse could be due to higher incomes from diamond mine employment. At the same time, low incomes and a lack of employment opportunities may also lead to family breakdown and violence.

Increased violent crime will mean a need for more resources for protective services. Most offenders in jail are convicted of violent crimes. Violent crime also affects services such as shelters. The need for social worker services will also increase when violent crimes happen. Violent crime will affect health services and community well-being more so than other types of crimes. Productivity is affected if injuries occur.

4.3 Property Crimes

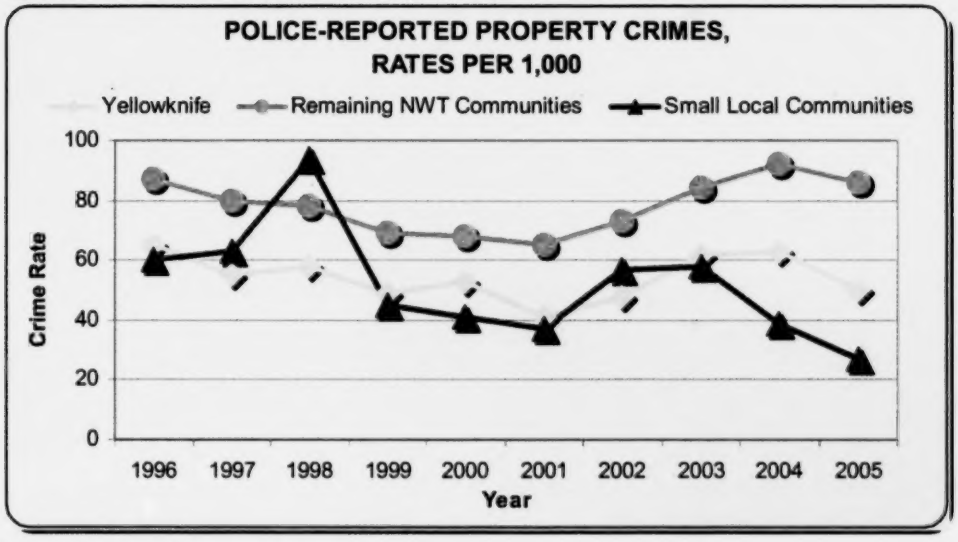
Property crimes that are most often reported are:

- Non-violent theft;
- Breaking and entering;
- Fraud;
- Possession of stolen goods.

4.3.1 Observations

Between 1996 and 2004, the rate of property crime went up and down. Small Local Communities seem to have had less property crime since 1996. Yellowknife has seen no clear trend.

Figure 13: Number of Police-reported Property Crimes



Source: RCMP UCR Statistics System.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	↓	—
De Beers	↑		

4.3.2 Analysis

Past years have shown that property crime is related to drug use. Although crimes dropped in 2005, it is still likely that crimes are committed to support drug use and addictions. It is unclear whether there is a link between higher income related to the diamond mines and people committing property crimes to buy drugs.

The downward trend in Small Local Communities could be in part because more people have stable jobs at the diamond mines. It could also reflect more community and police efforts.

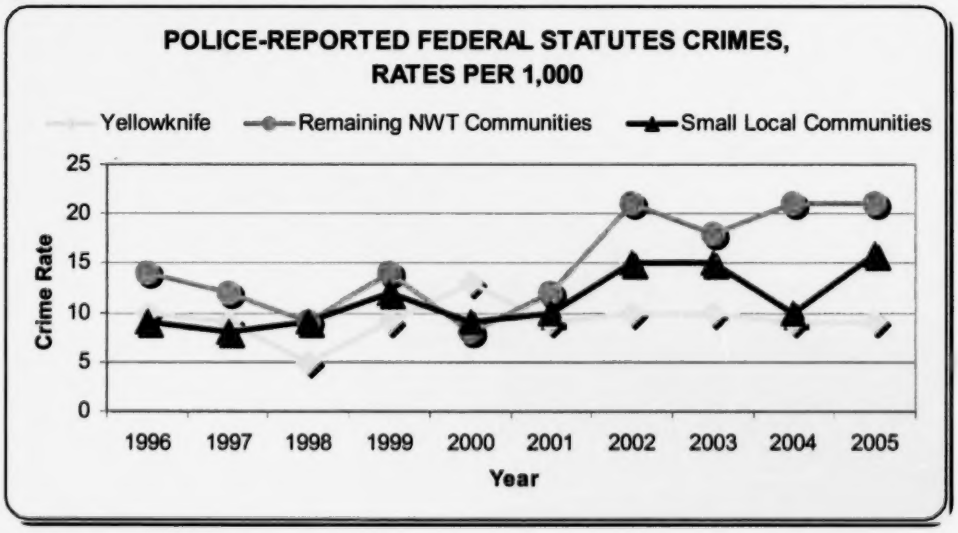
4.4 Federal Statute Crimes

Federal Statute Crimes include drug-related offences under the *Controlled Drugs and Substances Act.* Any rise will most likely be due to more drug activity.

4.4.1 Observations

The rate for this type of crime has been steady in Yellowknife. The rate in Small Local Communities grew since 1996. In 2005, it reached its highest point. The same thing is happening in Remaining NWT Communities.

Figure 14: Number of Police-reported Federal Statute Crimes



Source: RCMP UCR Statistics System.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	↑	—
De Beers	↑		

4.4.2 Analysis

Higher reported crime may be due to more pro-active police enforcement. There could also be more drug activity because of higher incomes due to mine related jobs. The RCMP has noted that as cash becomes more available, so does the money spent on drugs. When community incomes increase, so can the presence of drug dealers and drugs.

More organized crime in the NWT and opportunistic in-migration related to diamond mining could explain the rise in drug crime.

The RCMP confirms that the main drugs in use in the NWT are marijuana and cocaine. This includes crack cocaine. DCAB sees that there is more drug and alcohol abuse in communities. They also see easier access to drugs and alcohol and more harmful drugs, such as crack cocaine and crystal meth, being used.[12]

Drug crime can be harmful to communities. Drug use is often at the root of other crime. It can lead to violent crime causing injuries and emotional distress.

[12] DCAB (Diavik Communities Advisory Board), Annual Report 2004-05, page 12.

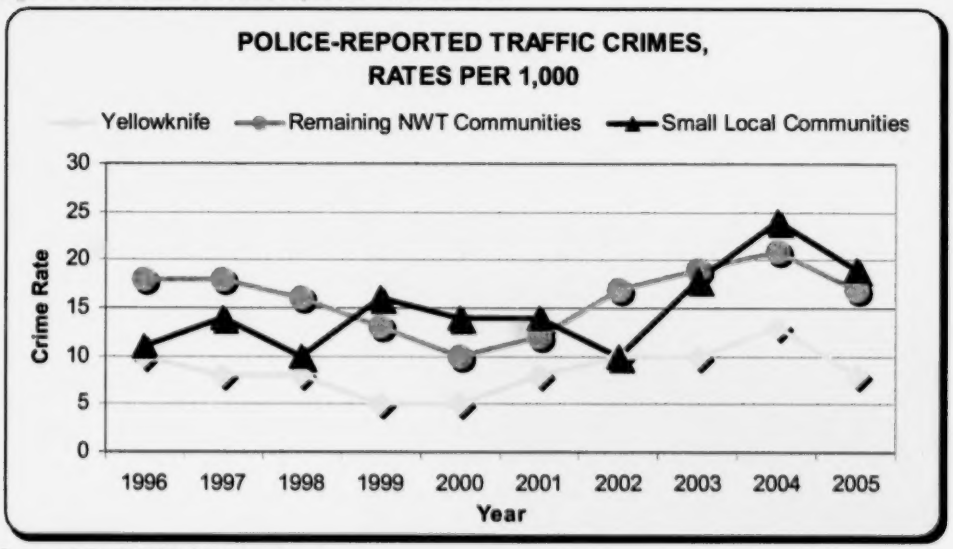
4.5 Other Crimes -Traffic Offences

Traffic crime covers impaired driving, failure to stay at the scene of an accident, and dangerous driving.

4.5.1 Observations

There have been some large increases in traffic crimes in Small Local Communities. However, for all years, the number of accidents falls within the normal range. The rate has been steady for Yellowknife.

Figure 15: Number of Police-reported Traffic Crimes



Source: RCMP UCR Statistics System.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	—		
Diavik	↑	—	—
De Beers	—		

4.5.2 Analysis

Data does not show any major influences on traffic crimes from the mining industry. The data does not show the number of accidents or how severe they are. The number of traffic crimes reported has gone up in some years. This is likely because of the changes in reporting or increases in RCMP traffic enforcement.

4.6 Other Criminal Code Offences

Other criminal code offences include:

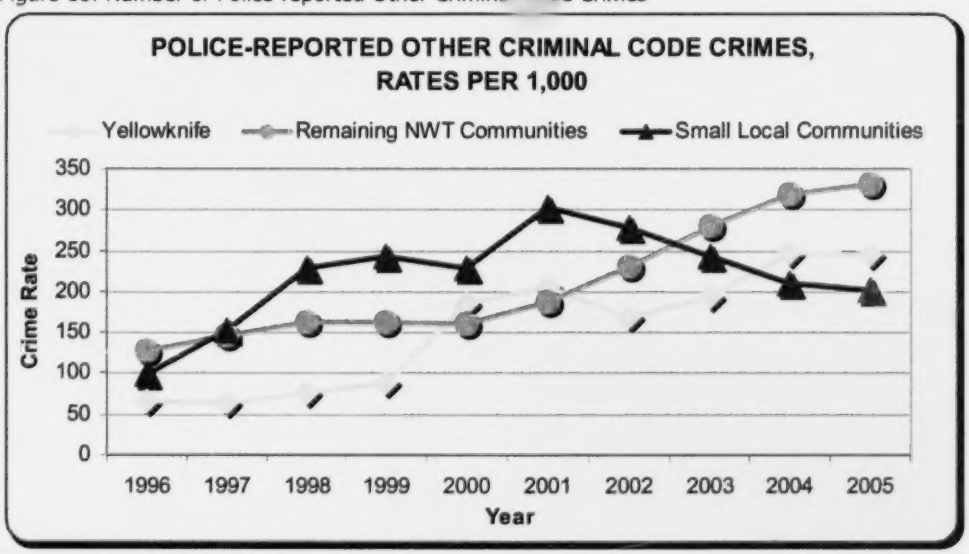
- mischief;
- probation or bail violations;
- prostitution;
- illegal gambling;
- arson.

4.6.1 Observations

A change in RCMP reporting between 1999 and 2000 led to a large increase in crimes in Yellowknife. Crimes are now recorded as Criminal Code crimes that were recorded before as territorial offences (mischief, drunk in a public place). However, the crime rate in Yellowknife has gone up by 31 percent since the change in reporting.

A change in reporting also took place between 2000 and 2002 in all other NWT communities. Since 2001, rates of Other Criminal Code offences in Small Local Communities have gone down. The rates are still going up in the Remaining NWT Communities.

Figure 16: Number of Police-reported Other Criminal Code Crimes



Source: RCMP UCR Statistics System.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND[13]	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	↓	↑
De Beers	↑		

4.6.2 Analysis

Most Other Criminal Code crimes are related to alcohol. The Yellowknife trend may be caused by more income or in-migration. These may be linked to diamond and other resource activity.

[13] Since change in reporting.

5 Housing

A few types of housing issue are most often linked with resource development. These include: the number of people who own a home; the number of people who need to share a house; and people's ability to maintain their home. Changes in the number of rental units also can affect the quality of housing. BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 4.

5.1 Ownership

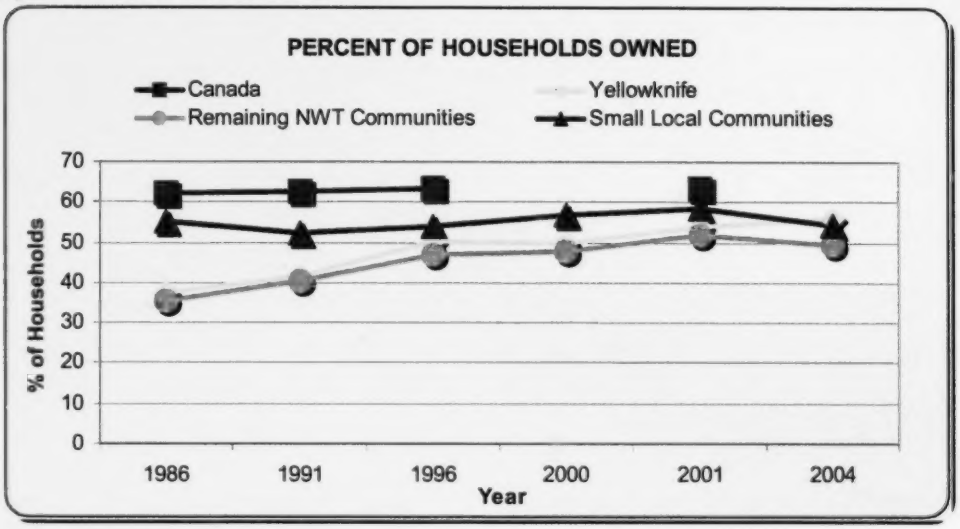
5.1.1 Observations

There is no change in the rate of home ownership in Small Local Communities before or after 1996. The Yellowknife rate has continued to grow slowly since 1996.

An 'Aboriginal' household is one where at least one Aboriginal person lives. In 2004, 52 percent of both Aboriginal and Non-Aboriginal adults owned homes.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	—	↑
De Beers	↑		

Figure 17: Percent of Households Owned



Source: NWT Housing Needs Survey, NWT Community Survey and Statistics Canada Census.

5.1.2 Analysis

The slow-down in the rise of ownership in Yellowknife could be linked to an increase in housing prices. This would be an expected result of in-migration from development.

In Small Local Communities, there is no change in ownership. Therefore, the positive impact predicted has been muted.

Higher incomes do not seem to have affected the level of ownership. Many households may have already accessed GNWT home ownership programs. This might also indicate that people's spending priorities may not have been focused on housing.

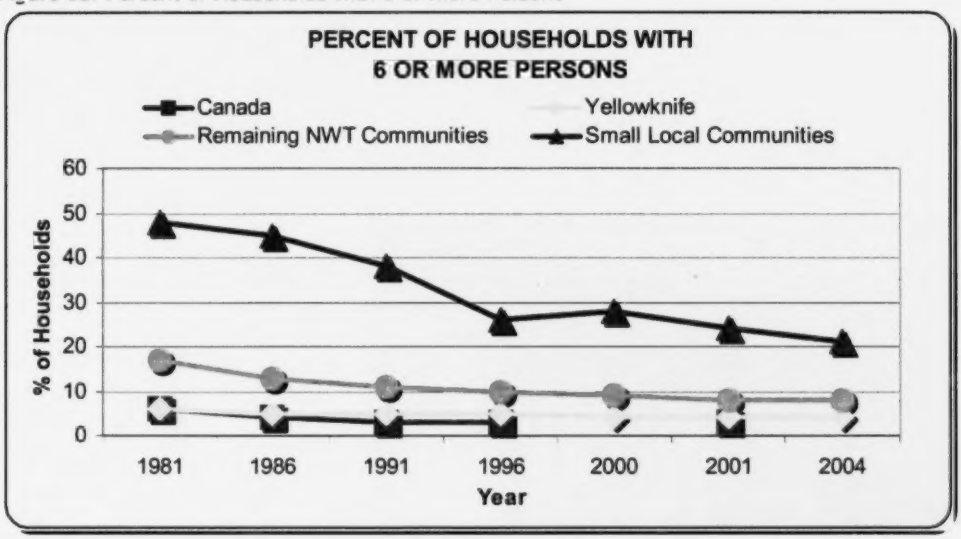
Owning a home should lead to improved security. This is most important when people reach retirement.

5.2 Crowding

5.2.1 Observations

Between 1981 and 1996, crowding went down in Small Local Communities. It went down about 22 percent. Since 1996, however, it has only gone down 4.5 percent.

Figure 18: Percent of Households with 6 or more Persons



Source: NWT Housing Needs Survey, NWT Community Survey, Statistics Canada Census.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↓		
Diavik	↓	↓	—
De Beers	↓		

5.2.2 Analysis

Family and household structures are changing a lot across the NWT and the rest of Canada. In the last 10 years, the number of households has grown faster than population in all regions of Canada. People have been expecting and demanding more 'living space' at home. They are forming more households, with fewer members. Values, expectations, availability, and income shape both the demand and supply of housing.

The diamond projects have not had the positive impact on housing that was expected. The slower drop in crowding in Small Local Communities and Yellowknife since 1996 shows this. Lack of suitable housing could be a reason for such a small drop. Northerners sometimes talk of 'couch surfing.' This might also explain the small drop in crowding.[14] Price rises, especially for Yellowknife, may also be a factor.

A drop in crowding should bring improved standards of living. It could also mean changes to family and social structure, and social interaction.

[14] This was raised as a development issue during 2004 GNWT Social Impact Workshops, held in preparation for the Mackenzie Gas Project.

5.3 Core Need

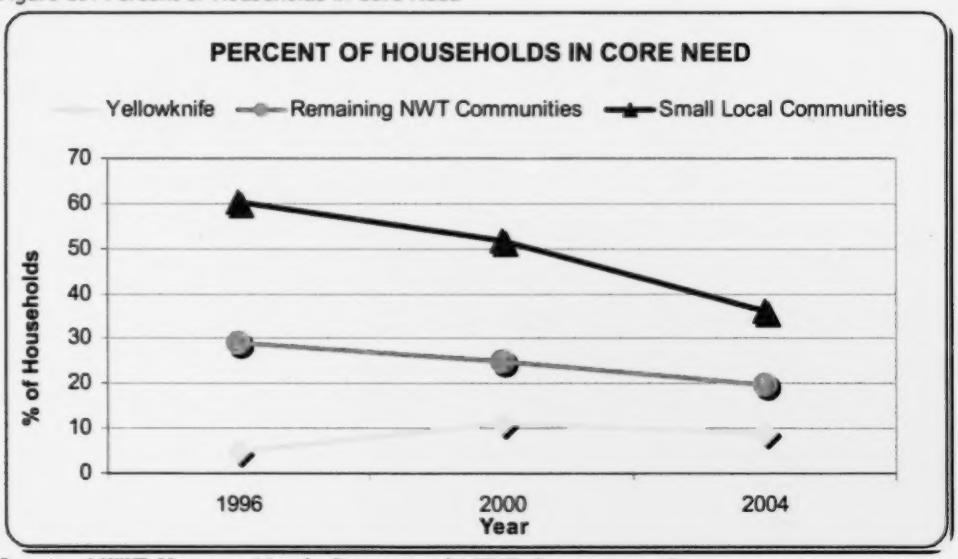
A household is in core need if it has any housing problems (suitability, adequacy, or cost). A household is also in core need if the total household income is below the community Core Need Income Threshold. Housing is 'affordable' when a household pays no more than 30 percent of its gross income for shelter. The NWT Housing Corporation uses the Threshold to show the income a household must have to own and operate a home or rent in the private market without government help. When incomes rise, the numbers of households in core need decreases. On the other hand, when housing prices go up, the numbers of households in core need also increases.

5.3.1 Observations

Since 1996, the percent of households in core need went down in all communities except Yellowknife. There has been more of a drop in core need in Small Local Communities than in Remaining NWT Communities. Core need in Yellowknife has gone up since 1996.

In the NWT, the percent of owned homes in core need has decreased. It dropped from 21 percent in 2000 to 14 percent in 2004. Rental housing in core need also went down from 20 percent in 2000 to 19 percent in 2004.

Figure 19: Percent of Households in Core Need



Source: NWT Housing Needs Survey and NWT Community Survey.

5.3.2 Analysis

Many factors can explain the drop in core need in Small Local Communities:

- Improvements in housing stock, mostly because of Northwest Territories Housing Corporation (NWTHC) programs;
- An increase in household income resulting from the mining industry. This adds to residents' ability to care for their own shelter costs; and
- A drop in interest rates, which makes housing more affordable.

The main reason core needs went up in Yellowknife was because inflation has pushed housing costs up.

Yellowknife's main problem is being able to afford housing. In the rest of the NWT, suitability or adequacy is the largest problem.

A drop in core need means more households are able to make it on their own (without the aid of income assistance programs). This should bring improved standards of living. A rise in core needs could lead to more people having a lower standard of living and could result in continued or greater need for social services.

5.4 Vacancies

5.4.1 Observations

The Yellowknife vacancy rate has improved in the last few years. Yellowknife's vacancy rate is now a bit higher than the national average.[15] The apartment vacancy rate was:

- 0.3 percent in 2002,
- 1.7 percent in 2003,
- 3.0 percent in 2004.[16]

5.4.2 Analysis

Low Canadian mortgage rates have helped improve the national average vacancy rate, as more people who were renting can now buy homes. This could be a factor in Yellowknife's rising vacancy rate.

National vacancy rates have also gone up because more rental units are being built. Building new rental units in the North does not happen as much, however, because of the cost to build the units. This is usually associated with the lack of skilled people and materials. This adds to problems of affordable housing, especially for units with three or more bedrooms. Of the 191 apartments for rent, only two had three or more bedrooms. The cost of rent for larger units is also a problem.

Yellowknife's low vacancy could be due to:

- High costs of materials;
- Labour shortages related to development;
- Housing prices going up because people are moving here for the diamond projects.

Limited places to stay in Yellowknife may cause crowding to continue in both Yellowknife and other communities. When there are few vacancies, it cuts down on migration into and within the NWT.

[15] CMHC 2004 Rental Market Report.
[16] Ibid.

6 Cultural Well-being & Traditional Economy

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 5.

6.1 Home-language use to Mother Tongue

Language is a way to transmit culture from one generation to another. It allows people of a culture to communicate and make sense of their shared experiences.[17]

6.1.1 Observations

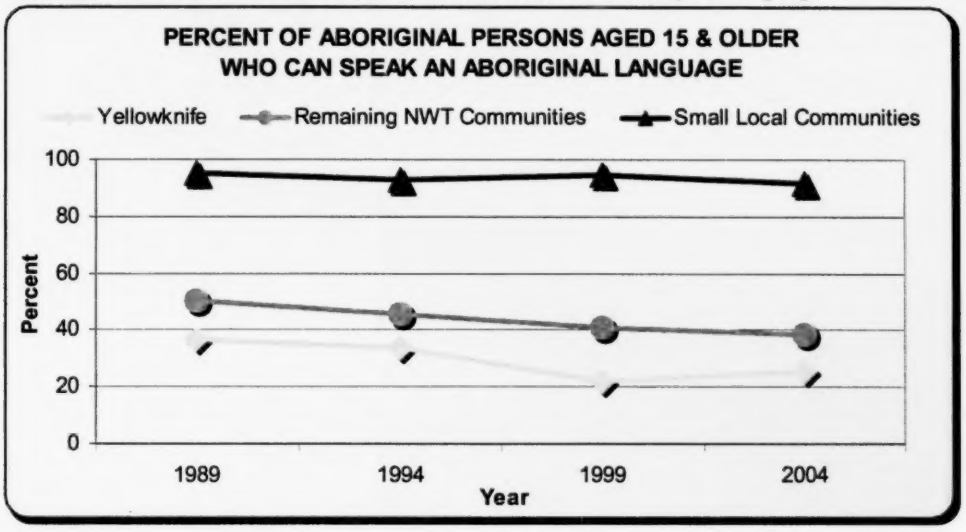
The percent of people who speak an Aboriginal language is falling in the NWT. Data shows a large decrease in the number of young people who speak an Aboriginal language. In Small Local Communities, however, the percent has stayed high.

Before 1999, Yellowknife saw a clear drop in the percent of people who speak an Aboriginal language. Since 1999, the use of Aboriginal language in Yellowknife went up. This may be the effect of people moving to Yellowknife from small NWT communities.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↓		
Diavik	↓	—	↓
De Beers	↓		

[17] Royal Commission on Aboriginal Peoples, Volume 3, 'Gathering Strength'

Figure 30: Percentage of Aboriginal Persons who can speak an Aboriginal Language



Source: NWT Labour Force Survey and NWT Community Survey.

6.1.2 Analysis

It may be that more people are speaking Aboriginal languages in Yellowknife because more are moving in from small communities. This may be a short-term trend.

Loss of language has an impact on keeping and passing on Aboriginal culture, heritage and traditions. Language is a key way to transfer such knowledge.

6.2 Workforce-aged Group Engaged in Traditional Activities

Traditional activities include cultural activities such as:

- hunting;
- trapping;
- fishing;
- harvesting;
- sewing;
- eating country food.

These activities let people use traditional skills and knowledge. This provides cultural and social benefits.

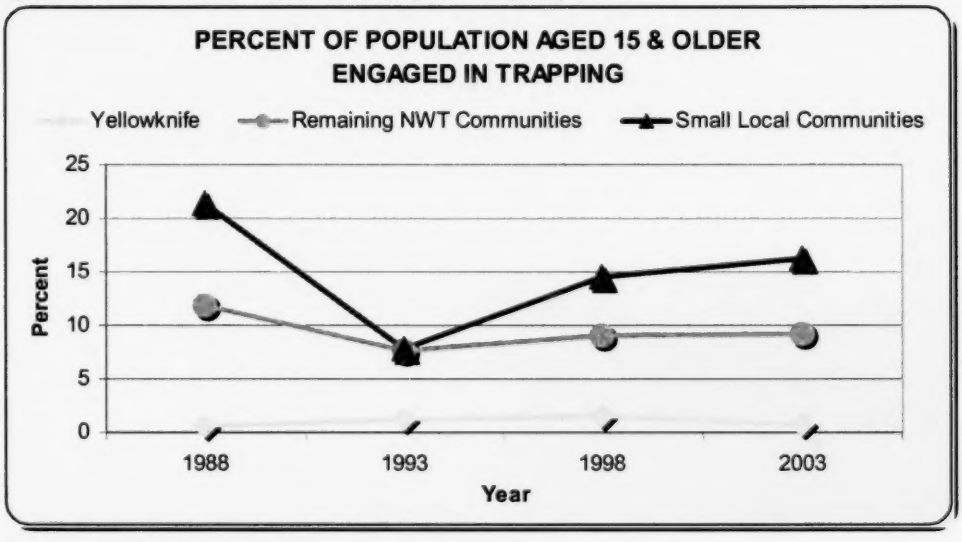
6.2.1 Observations

In Yellowknife, the percent of people trapping is low and has not changed. Many people outside Yellowknife do some form of trapping. Trapping is mostly important in Small Local Communities. Since 1993, trapping has gone up in these communities.

From 1998 to 2003, the number of people, over the age of 15, who hunted or fished, went down 8 percent. However, Small Local Communities saw a slight increase during that time.

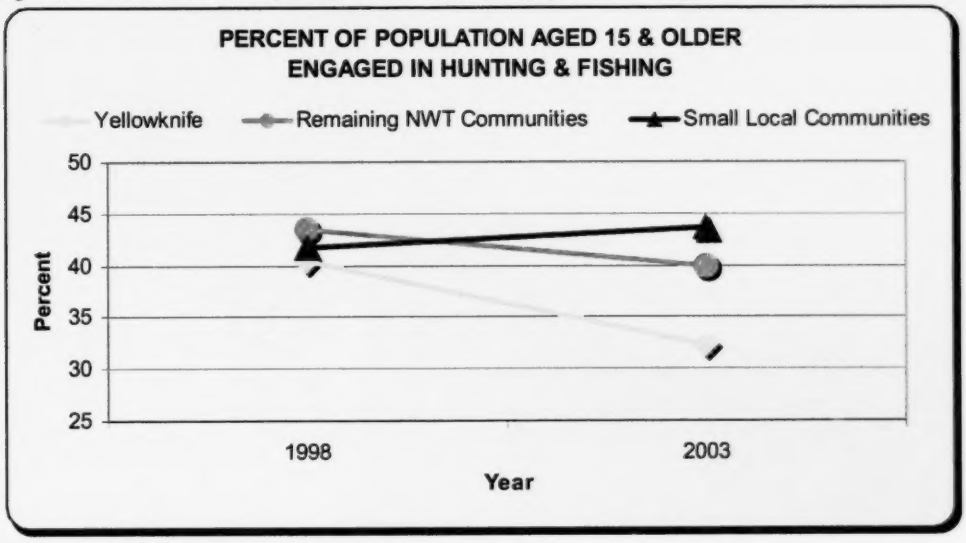
Trends in the percent of households where half or more of the meat or fish eaten is harvested, fall within the normal range of change.

Figure 31: Percent of the Population Engaged in Trapping



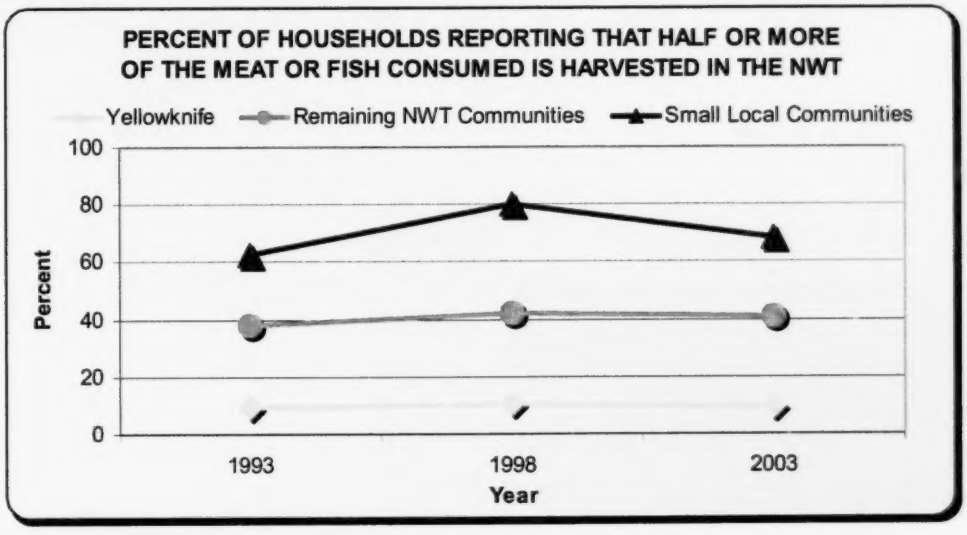
Source: NWT Labour Force Survey and NWT Community Survey.

Figure 32: Percent of the Population 15 and Older Engaged in Hunting or Fishing



Source: NWT Labour Force Survey and NWT Community Survey.

Figure 33: Percent of Households where half or more of the Meat or Fish Consumed is Harvested in the NWT



Source: NWT Labour Force Survey and NWT Community Survey.

Trapping Trends

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↓	↑	—
Diavik	↓		
De Beers	—		

Hunting and Fishing Trends

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↓	↑	↓
Diavik	↑		
De Beers	—		

6.2.2 Analysis

Trapping has been going up in Small Local Communities for some time. It has continued to go up since 1996. This may be because of higher incomes. This could be linked to the mines and rotational work schedules.

More trapping in Small Local Communities could strengthen the passing down of traditional knowledge. Passing down this knowledge can strengthen cultural well-being. It can help communities to be more vital.

More hunting and fishing in Small Local Communities could be due to more income and the rotational work schedule. There is a constant rise in hunting and fishing in Small Local Communities. This could strengthen cultural well-being and community vitality.

There seems to be no link between trends in the country foods eaten and the diamond mines.

NON-TRADITIONAL ECONOMY

7 Income & Employment

7.1 Average Income

The data here comes from income tax returns. The more people are paid, the higher average income is. Total employment income goes up as wages rise and as more people are working.

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 6.1.

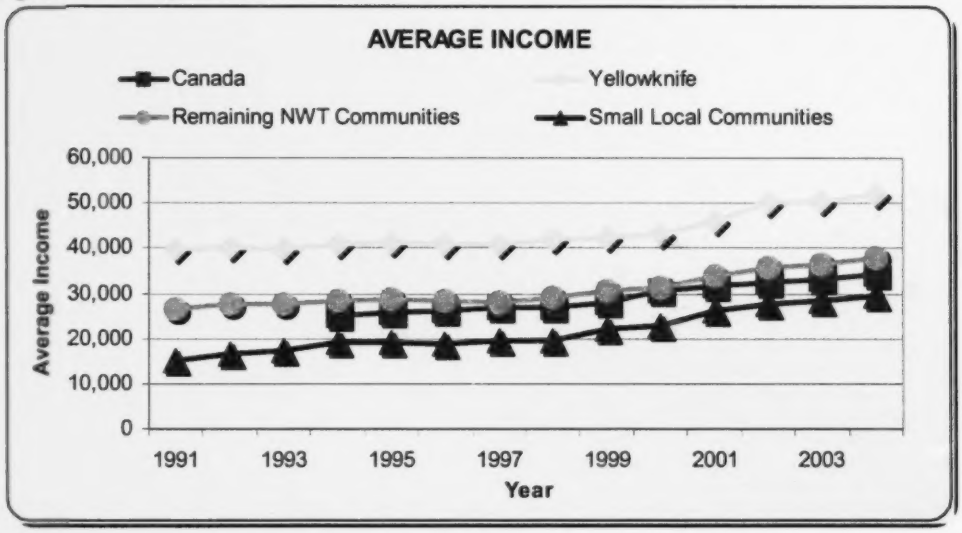
7.1.1 Observations

Average income in the NWT has risen since 1997. During this time, Small Local Communities saw the greatest increase, with growth almost twice that of Canada.

"Total employment income" in the NWT started to clearly go up after 1997. From 1997 to 2004, income in the NWT grew faster than in the rest of Canada. Small Local Communities had the largest growth, at 104 percent.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	↑	↑
De Beers	↑		

Figure 20: Average Income



Source: Statistics Canada.

7.1.2 Analysis

Trends in income can be due to development and to government restructuring during the mid-1990s.

The trends in Small Local Communities are most likely due to diamond mine development.

Higher average income should mean a lower number of income assistance cases. Higher average income should also mean more people have a better standard of living.

7.2 Proportion of High-income Earners

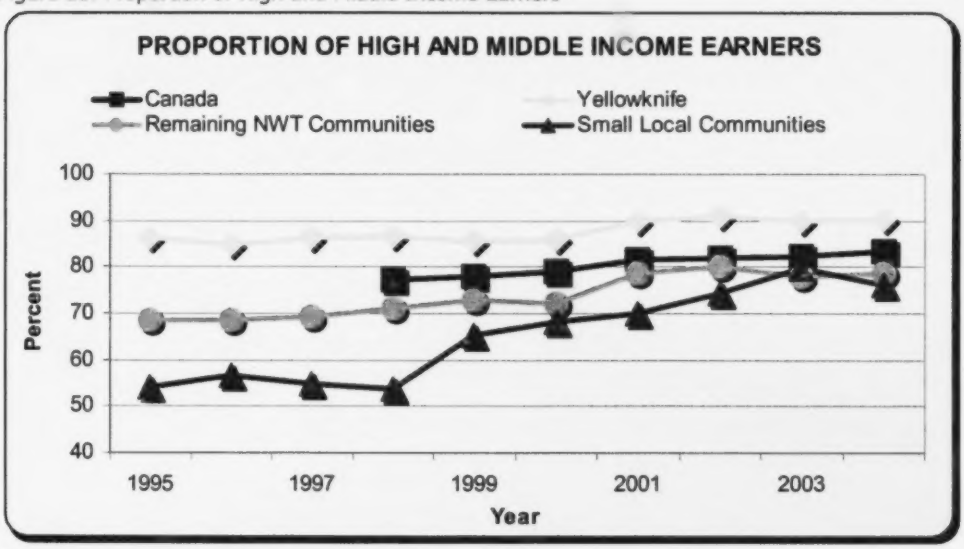
A growing gap between high- and low-income earners can lead to imbalances in society. Close monitoring helps efforts to correct imbalances in the NWT. High-income earners are people who earn more than $50,000 a year. Families earning less than $25,000 a year have low income.

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 6.2.

7.2.1 Observations

Small Local Communities have seen the most improvement in their economic structure. The proportion of high- and middle-income families has risen dramatically. This also means the proportion of low income families has similarly dropped. In 2004, the percent of low income families in Small Local Communities went up. This is the first time this group has increased since 1998.

Figure 21: Proportion of High and Middle Income Earners



Source: Statistics Canada.

Wage Disparity

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	↓	↓
De Beers	↑		

7.2.2 Analysis

There were concerns during environmental assessments that income levels would become more unequal because of diamond mine development. This does not seem to have come true. More people are now in the upper- and middle-income range.

7.3 Income Assistance Cases

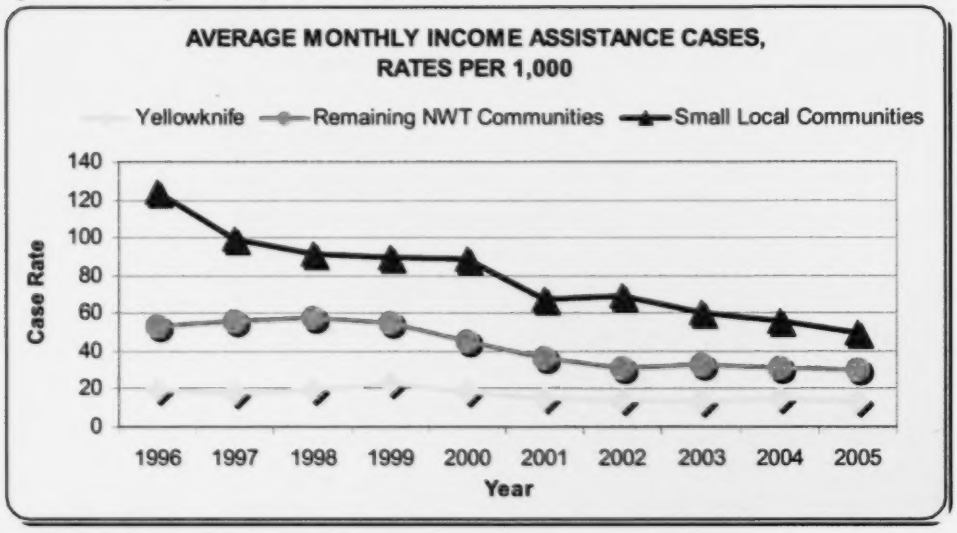
Case data comes from the average number of households receiving assistance each month.

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 6.3.

7.3.1 Observations

The case rate has not changed much in Yellowknife. Income assistance rates dropped in Small Local Communities, by about 50 percent. This drop has been greater in these communities than in Remaining NWT Communities.

Figure 22: Average Monthly Income Assistance



Source: NWT Education, Culture & Employment and NWT Bureau of Statistics.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↓		
Diavik	↓	↓	↓
De Beers	↓		

7.3.2 Analysis

Between 1996 and 1997, there was a drop in income assistance cases. This came from policy changes.

After 1997, cases dropped because more people were working in Small Local Communities. This could be due to better employment, education and income opportunities related to the mining industry.

The Yellowknife rate should have dropped too. It dropped only a small amount. It might not have dropped more because people without jobs were moving to Yellowknife.

Fewer people needing income assistance allows government to focus on other social issues.

7.4 Employment Rate

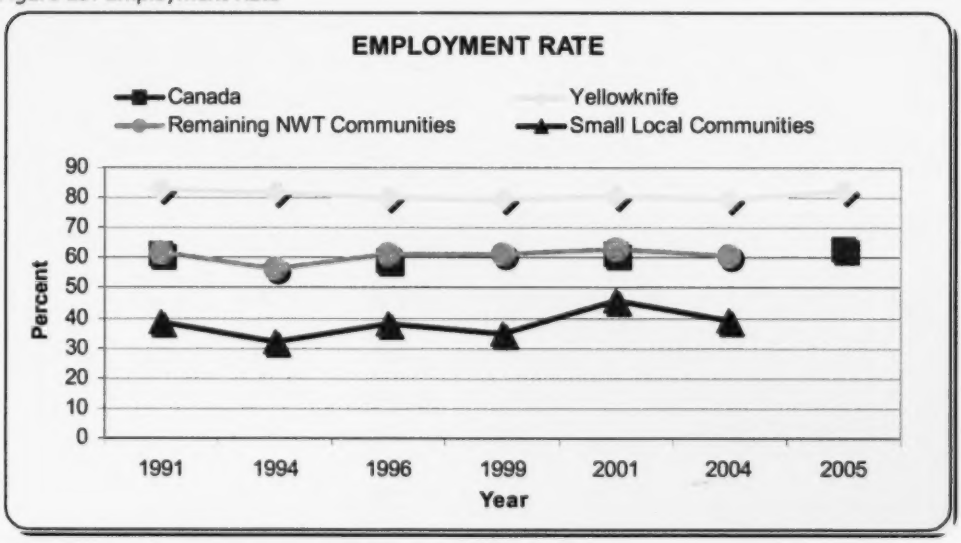
The employment rate is the percent of the total population aged 15 and over who are employed.

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 6.4.

7.4.1 Observations

The employment rate in Yellowknife has not changed much since 1996. The rate in Small Local Communities was rising before 1996. The Small Local Communities have also seen a rise in the percent of working-aged people who work for more than 6 months each year. Employment in Small Local Communities is still below the Canadian rate.

Figure 23: Employment Rate[18]



Source: Statistics Canada Census, NWT Labour Force Survey and NWT Community Survey.

[18] Comparisons between the labour force survey (LFS) completed by the Bureau of Statistics and the Census should be done with caution. Census indicators are often higher due to seasonal employment activities.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑	↑	—
Diavik	↑		
De Beers	↑		

7.4.2 Analysis

The number of workers in Small Local Communities has been going up. One factor is the diamond mines. Greater local access to culturally-fitting education and training has helped improve education. With this, people have been more able to find jobs.

The Department of Education, Culture and Employment has worked with industry to develop programs. There are now programs for mine-related training as well as for apprenticeship. Because of this, more people might be able to stay in their communities. More opportunities for work in Small Local Communities can lead to a stronger NWT economy.

7.5 Unemployment Rate

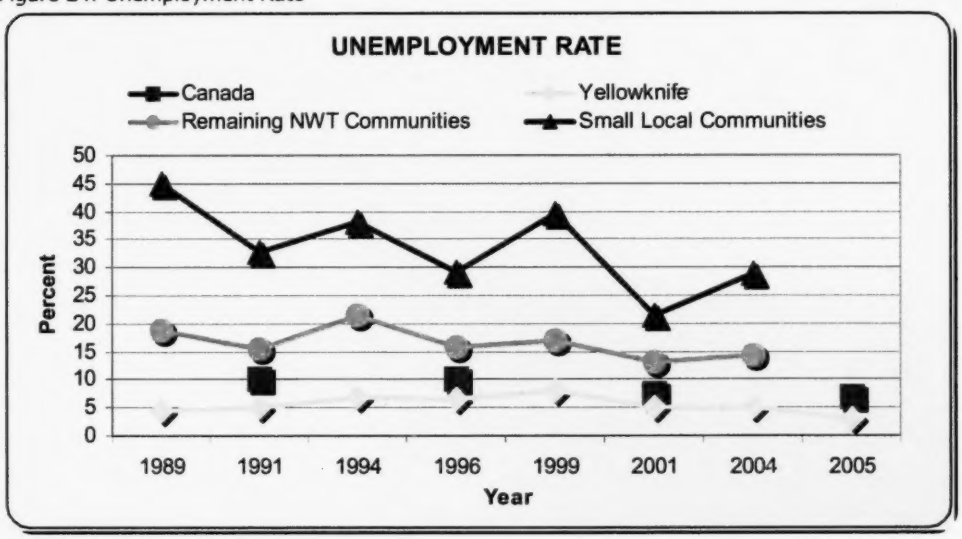
The unemployment rate shows the percent of adults (aged 15 and over) looking for work but who are unable to find work.

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 6.5.

7.5.1 Observations

The unemployment rate in Yellowknife has not changed much. The rate in Small Local Communities is dropping faster than in Remaining NWT Communities.

Figure 24: Unemployment Rate[19]



Source: Statistics Canada Census, NWT Labour Force Survey and NWT Community Survey.

[19] Comparisons between the labour force survey (LFS) completed by the Bureau of Statistics and the Census should be done with caution. Census indicators are often higher due to seasonal employment activities.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↓		
Diavik	↓	↓	—
De Beers	↓		

7.5.2 Analysis

People no longer looking for work may cause the unemployment rate to drop. Since the participation rate has stayed consistent, we can assume more people are becoming employed. People moving in and out of communities can also change unemployment rates.

Fewer people not working in Small Local Communities may improve the standard of living in the NWT.

7.6 Participation Rate

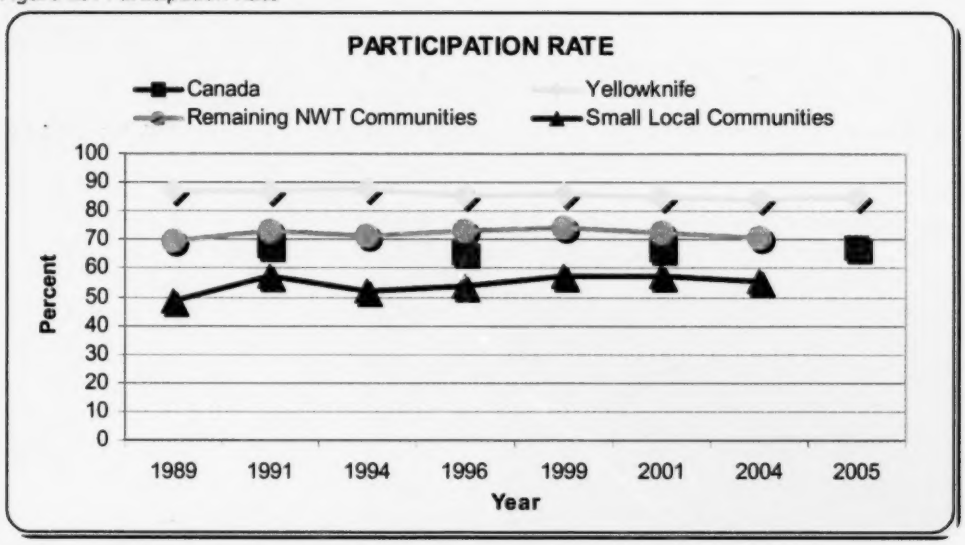
The participation rate is the percent of adults (aged 15 and older) who are working or looking for work.

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 6.6.

7.6.1 Observations

There is no clear trend in the participation rate across the NWT since 1996.

Figure 25: Participation Rate[20]



Source: Statistics Canada Census, NWT Labour Force Survey and NWT Community Survey.

[20] Comparisons between the labour force survey (LFS) completed by the Bureau of Statistics and the Census should be done with caution. Census indicators are often higher due to seasonal employment activities.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	↑		
Diavik	↑	—	—
De Beers	↑		

7.6.2 Analysis

Since 1999, we were expecting to see a rise in the participation rate. This is because the working age population has gone up. Several things can affect the participation rate:

- Changes in the working age population;
- Frustration with the wage economy;
- Obstacles to participation such as limited access to higher education, daycare, and remoteness;
- Out-migration.

8 Education

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 7.

8.1 High School Completion

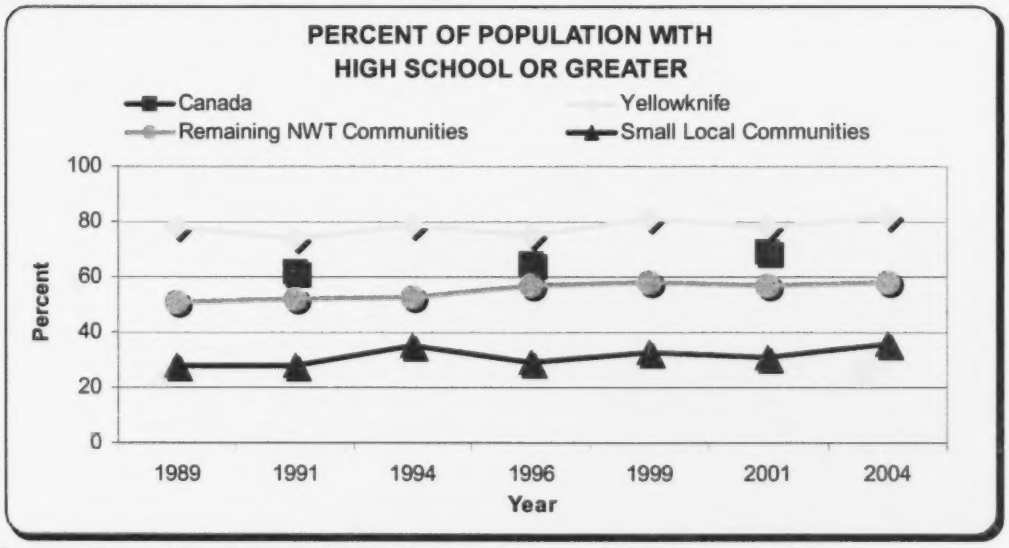
This data shows people who have at least finished high school. 'High School Completion' includes people who have completed high school or grade 12 diplomas. It also includes General Education Diplomas (GED) given to mature students. 'Greater than high school' means people who have a trade certificate, college diploma, or university degree.

8.1.1 Observations

The percent of people with high school or greater in Yellowknife and Small Local Communities has gone up. This has increased steadily since 1996. However, both areas saw this trend before the diamond mines.

The percent of people aged 20 to 29 with a high school diploma or greater has stayed steady for Yellowknife and Canada. Small Local Communities saw a rise.

Figure 26: Percent of the Population with High School or Greater



Source: Statistics Canada Census, NWT Labour Force Survey and NWT Community Survey.

8.1.2 Analysis

More grade levels were offered in the smaller communities starting in the late 1990s. This led to a rise in graduates. Grade extensions were in place in Small Local Communities by 1999. As well, more community support for education, and the support of other organizations, are affecting how much people value education.

There was concern, brought up in environmental assessments, that jobs at the mines would take people away from finishing their schooling because the pay was so good. This does not seem to have happened because permanent mine jobs require a high school diploma. Scholarships and other company efforts may also be factors.

Education levels have gone up for people age 20 to 29. There is a direct link between this, training efforts past high school, and stronger partnerships between government and industry.

In Small Local Communities, there has been a drop in the percent of people with a certificate or diploma. This could be due to people moving out of the communities.

8.2 Less than Grade 9

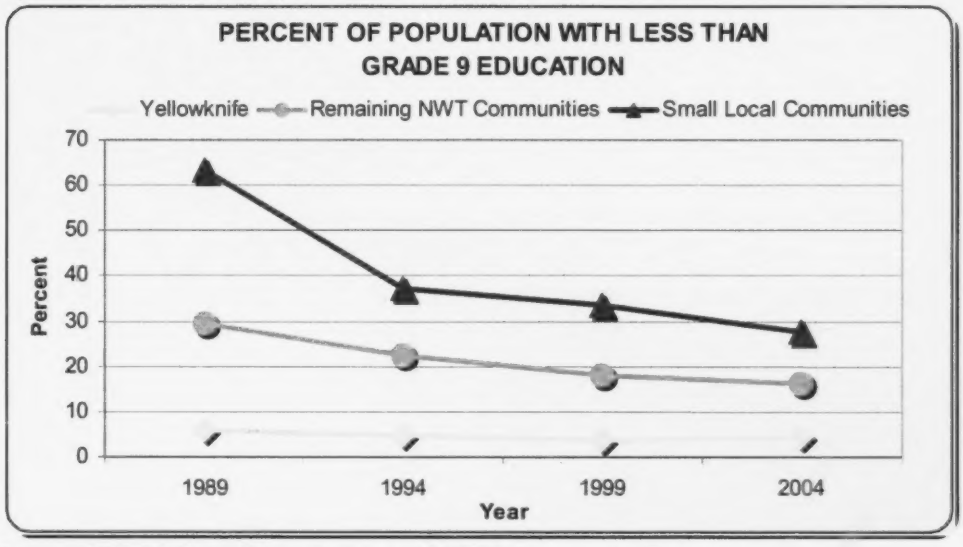
This covers people aged 15 and older with less than grade 9. It includes youth now finishing Grade 9.

8.2.1 Observations

Across the NWT, communities saw a large drop in the percent of people with less than Grade 9 education from 1989 to 1994. This drop has continued since 1994, but at a slower rate.

Those aged 20 to 29 are driving this drop. Small Local Communities saw a decrease in people with less than grade 9 of almost 30 percent from 1989 to 1994. Since 1994, these communities saw a further 19 percent drop. This is a bit higher than the 15 percent decrease since 1994 in Remaining NWT Communities.

Figure 27: Percent of the Population with less than Grade 9



Source: NWT Labour Force Survey and NWT Community Survey.

8.2.2 Analysis

The drop in the percent of people in Small Local Communities with less than grade 9 before 1994 is partly due to grade extensions. Young people are starting to see the need for skills and education to get good jobs. This explains the marked drop in the percent of those aged 20 to 29. As predicted by BHP, ongoing "Stay in School" plans make a difference.

There is a direct link between education and employment. Income assistance cases could also drop.

9 Business

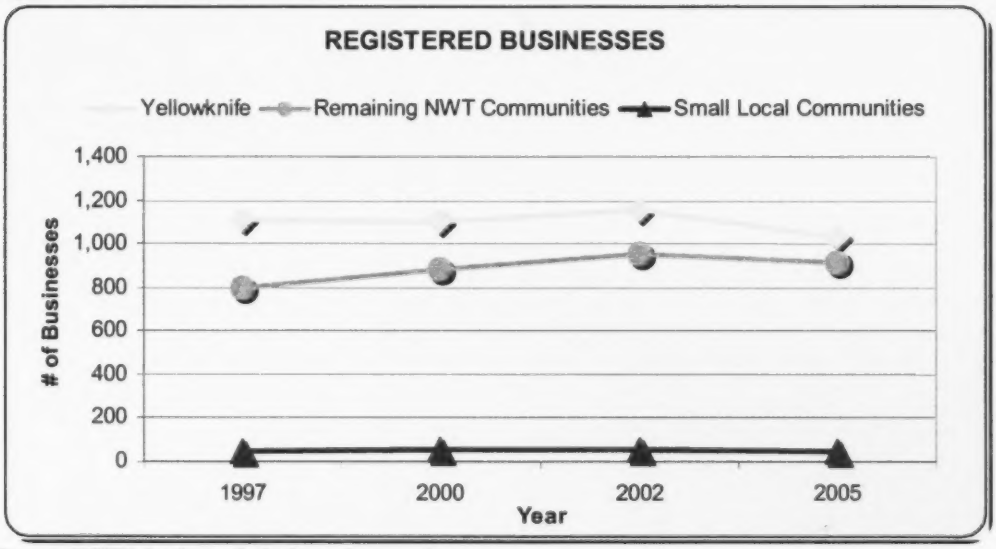
BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 8.

9.1.1 Observations

There has been a small rise in NWT business activity since 1997. Remaining NWT Communities saw the biggest rise. Registered businesses in Yellowknife have gone down in recent years.

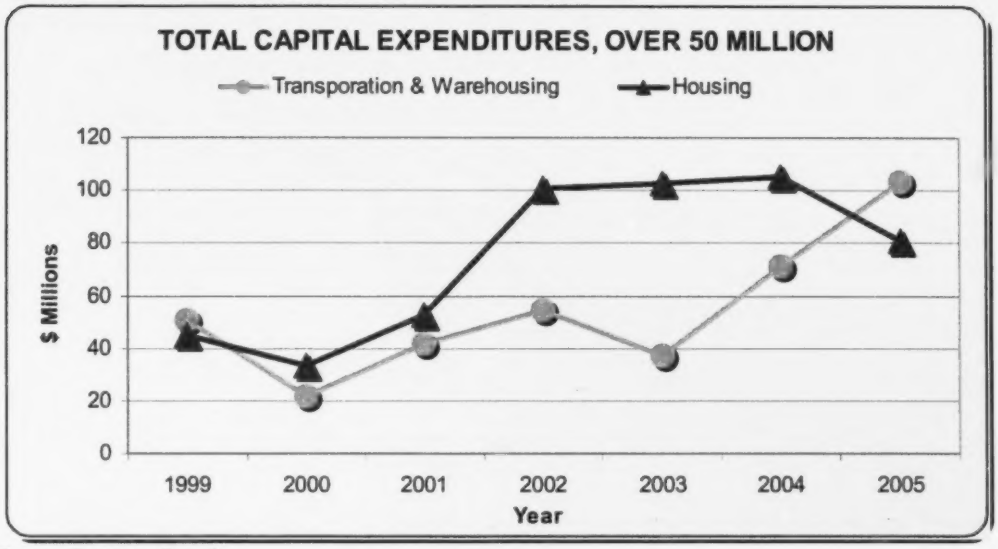
Not including mining, oil and gas and government, major spending has occurred in two sectors. These sectors are housing, and transportation and warehousing. Investments in buildings and equipment have increased in both sectors since 1999.

Figure 28: Registered Businesses



Source: RWED database of telephone directory listings.

Figure 29: Private & Public Investment, Total Capital Expenditures



Source: Statistics Canada

COMPANY PREDICTED TREND		GNWT OBSERVED TREND
BHP Billiton	↑	↑
Diavik	↑	
De Beers	↑	

9.1.2 Analysis

Yellowknife's economy saw the closure of two mines in the city and the Territory splitting up. Diamond mining has been a factor in the well-being and growth of the Yellowknife economy since. The recent decrease in the number of Yellowknife businesses may be caused by competition for labour and an increase in larger businesses. Small Local Communities have seen some business growth – most likely due to the diamond mines. Oil and gas activities may explain the faster rise in Remaining NWT Communities.

The growth being seen in Small Local Communities may mean more balanced economic growth will be seen in this region.

Overall, NWT business indicators are showing good growth. The increase in capital spending indicates the NWT is expanding its economy.

10 Net Effect on Government

BHP, Diavik and DeBeers predicted certain trends in their EARs. What they said can be found in Appendix B, Section 9.

10.1.1 Observations

Many things can lead to higher government costs. These include:

- changes in social trends, such as a change in the crime rate;
- changes in the number of people living in the NWT;
- changes in use, such as increased industrial road use;
- inflation.

Resource development does create revenue for the GNWT. Diamond mines pay property, fuel, and payroll tax. They also pay tax on corporate and personal income. Gross revenue from these taxes are estimated to be over $40 million per year. However, the Territorial Formula Financing (TFF) arrangements reduce this amount. Under 2006-07 arrangements, net revenues to the GNWT from the diamond mines are about $22 million.

New TFF arrangements will be announced in the 2007-08 federal budget. This is expected to change the amount of revenue received. Changes in the number of people living in the NWT also affect the revenue received. The 2004 Community Survey tells us that about 245 diamond mine workers came from other places. Some would have moved to the NWT with a spouse and perhaps a child. From 2004-05 to 2006-07, each new person living in the NWT would have meant over $13,000 more per year in TFF Grants.

Since 1999-00, GNWT spending on programs and services has gone up around 6 per cent each year. The cost of maintaining program and service levels is increasing. Program expectations are also under pressure. To some extent, these are linked to the diamond mining industry. Whether the GNWT can keep its spending at the needed levels will depend on its arrangements with the federal government. These will need to include, for example, an adequate arrangement for sharing revenue from resources.

The GNWT also makes strategic investments. It makes these so that the NWT can see the most benefit from development with the least negative impact. Examples are action plans relating to training, STIs, or secondary industry. Other examples are changes to laws, such as the new *Protection Against Family Violence Act.*

Net Cost to Government

COMPANY PREDICTED TREND		GNWT OBSERVED TREND
BHP Billiton	↑	
Diavik	↓	—
De Beers	↑	

10.1.2 Analysis

The territorial government is seeing costs linked to development. It has limited ability to offset these with revenue. This limits its ability to adapt to the demands of development.

11 Sustainable Development

11.1 Secondary Industry

For diamond mines, an example of secondary industry is the cutting and polishing of rough diamonds. Secondary industry can also mean more chances in northern jewellery design, manufacturing, retailing and diamond tourism.

Not all of the diamond mine companies talked about secondary industry in their EARs. To find more information about what they said, please see Appendix B, Section 10.

11.1.1 Observations

Access to rough diamonds created a chance for cutting and polishing businesses to start up in the NWT. This will lead to more chances in northern jewellery design, manufacturing, retailing and diamond tourism.

In 2006, the NWT had three diamond processing plants:

- Arslanian Cutting Works NWT Ltd.;
- Polar Bear Diamond Factory;
- Laurelton Diamonds.

Together, these employ 110 people in their NWT factories. Cutters, polishers, bruters and sawyers make up most of the work force. Arslanian Cutting Works NWT Ltd. and Polar Bear Diamond Factory both participate in the GNWT Polished Diamond Certificate Program.

COMPANY PREDICTED TREND		GNWT OBSERVED TREND	
		Small Local Communities	Yellowknife
BHP Billiton	—		
Diavik	—	↑	↑
De Beers	—		

11.1.2 Analysis

Growth of this industry is due to:

- Local access to rough diamonds;
- GNWT certification programs;
- Persistence and marketing by the GNWT, the private sector, and Aboriginal Authorities.

Continued growth in this sector will help the NWT to keep a diverse economy and to sustain development.

CLOSING

12 Summary of Observed Trends

Downward arrows (↓) and upward arrows (↑) show the predicted or observed direction of change since the start of the first diamond project in 1997. If there is no trend, if no predictions were made, or if there appears to be inconsistency in the predictions made, a dash (---) appears.

INDICATOR	COMPANY PREDICTED TREND			GNWT OBSERVED TREND	
	BHPB	Diavik	De Beers	Small Local Communities	Yellowknife
Community, Family & Individual Well-being					
Potential Years of Life Lost	↑	↑	↓	↓	---
Injuries	↑	↑	↓	---	↓
Suicides	---	---	↑	---	---
Communicable Diseases	---	↑	↑	↑	↑
Teen Births	---	---	↑	↓	---
Single-parent Families	↑	---	↑	↑	---
Children Receiving Services	↑	↑	---	↑	---
Family Violence	↑	↑	↑	---	---
Total Police-reported Crimes	↑	↑	↑	---	↑
Violent Crimes	↑	↑	↑	---	↑
Property Crimes	↑	↑	↑	↓	---
Federal Statute Crimes	↑	↑	↑	↑	---
Other Criminal Code Offences	↑	↑	↑	↓	↑
Home Ownership	↑	↑	↑	---	↑
Housing Quality (crowding, core need)	↑	↑	↑	↑	↓
Cultural Well-being and Traditional Economy					
Language Use	↓	↓	↓	---	↓
Traditional Activities	↓	---	---	↑	↓

INDICATOR	COMPANY PREDICTED TREND			GNWT OBSERVED TREND	
	BHPB	Diavik	De Beers	Small Local Communities	Yellowknife
Non-traditional Economy					
Average Income	↑	↑	↑	↑	↑
Wage Disparity	↑	↑	↑	↓	↓
Income Assistance Cases	↓	↓	↓	↓	↓
Employment Rate	↑	↑	↑	↑	---
Unemployment Rate	↓	↓	↓	↓	---
Participation Rate	↑	↑	↑	---	---
High School Completion	↑	↑	↑	↑	↑
Less than Grade 9	↓	↓	↓	↓	↓
Business Activity	↑	↑	↑	↑	
Net Effect on Government					
Net Effect on Government (Cost)	↑	↓	↑	---	
Sustainable Development					
Secondary Industry	---	---	---	↑	↑

13 Summary of Findings

INDICATOR	OBSERVATIONS	FINDINGS
Community, Family & Individual Well-being		
Potential Years of Life Lost (PYLL)	The PYLL in Small Local Communities has gone down a little.	This could be due to better standards of living, better health services, or better access to health services.
Injuries	Injuries are going down, particularly in Yellowknife.	The downward trend in Yellowknife may be due to injury prevention efforts.
Suicides	There is no trend in Small Local Communities.	The small number of suicides makes it hard to define trends.
Communicable Diseases	Sexually- transmitted Infections (STIs) have gone up in Small Local Communities and Yellowknife . This Report does not note any trend for tuberculosis.	If there is an increase in STIs, it may be due to: reduced supervision by parents because of work schedules; more alcohol and drug abuse because of higher incomes; a general disregard for safe sex.
Teen Births	The teen birth rate has not changed much in Yellowknife. It dropped in Small Local Communities.	The decrease in teen births may be due to more planned parenting, delayed childbirth, or more use of birth control.
Single-parent Families	Single-parent families are increasing in Small Local Communities.	Increases in single-parent families coincide with diamond mine development. Factors could include rotation work schedules or one partner living out of the house in the hope of finding work.
Children in Care	The number of children receiving services is going up in Small Local Communities.	The trend may be due to changes in the *Act*, changes in staff, or greater public and staff reporting.
Family Violence	Spousal assault cases have dropped in the NWT since 1999. Women and children using shelters has stayed the same.	Alcohol abuse adds to family violence cases. Shelter data does not capture some women who do not access the shelters. Reported spousal assault cases may not represent all incidents.

INDICATOR	OBSERVATIONS	FINDINGS
Crime	There has been a steady rise in total crime in Yellowknife since 2002. It has been going down each year since 2002 in Small Local Communities.	The growth in total crime in Yellowknife could be linked to resource development. The drop in Small Local Communities could be connected to more crime prevention activities; it matches the pattern Diavik predicted would occur.
	Violent crime has gone up in Yellowknife. Small Local Communities saw no change.	Violent crime can be linked to more alcohol and drug use. This could be due to higher incomes from diamond mine employment.
	There is no trend in Yellowknife property crime. In Small Local Communities, this type of crime is down.	It is unclear whether there is a link between higher income related to the diamond mines and people committing property crimes to buy drugs. The drop in property crime in Small Local Communities may be in part because more people have stable jobs at the diamond mines. The drop could also reflect more community and police efforts.
	The rate for of federal statute crime has gone up in Small Local Communities. There has been no change in Yellowknife.	The increase in federal statute crime may be due to pro-active police enforcement. There could also be more drug activity because of higher incomes due to mine-related jobs. More organized crime in the NWT and opportunistic in-migration related to diamond mining could explain the rise in drug crime.
	Rates of criminal code traffic offences fell in Small Local Communities. No trend is seen in Yellowknife.	Data does not show any major influences on traffic crimes from the mining industry.
	Other criminal code crimes have decreased in Small Local Communities since 2001. The rate is increasing in Yellowknife.	The Yellowknife trend in Other criminal code crimes may be caused by more income or in-migration. These may be linked to diamond and other resource activity.

INDICATOR	OBSERVATIONS	FINDINGS
Housing	The trend in the number of homes owned in Yellowknife has slowed down. It has not changed in Small Local Communities. Crowding has been dropping in Small Local Communities, but has been dropping more slowly since 1996. The percent of homes in core need dropped in Small Local Communities. It increased slightly in Yellowknife. Yellowknife's vacancy rate is a bit higher than the Canadian average.	The slow-down in the rise of home ownership in Yellowknife could be linked to an increase in housing prices. This would be an expected result of in-migration from development. Higher incomes do not seem to have affected the level of home ownership. Diamond projects have not had the positive impact on crowding that was expected. Lack of suitable housing, intra-migration and house price rises may be factors. Fewer homes in core need in Small Local Communities can be linked to: • Public and private improvements to housing stock; • An increase in household income resulting from the mining industry; and • A drop in interest rates. Inflation, perhaps linked to in-migration from development, explains the increase in core need in Yellowknife. Yellowknife's low vacancy could be linked to: • High costs of materials; • Labour shortages related to development; and • Housing prices going up because people are moving to Yellowknife.
Cultural Well-being & Traditional Economy		
Language Use	Use in Small Local Communities stays high. Yellowknife is seeing an increase since 1999.	More people may be speaking Aboriginal languages in Yellowknife because more are moving in from small communities.
Workforce-aged Group Engaged in Traditional Activities	The proportion of adults trapping in Small Local Communities has risen since 1993. It remains low in Yellowknife. The proportion of adults hunting or fishing has risen in Small Local Communities, but dropped elsewhere. No change is noted in Harvested Meat or Fish Consumed.	More trapping, hunting and fishing in Small Local Communities could be due to more income and the rotational work schedule. There seems to be no link between the amount of country food consumed and the diamond mines.

INDICATOR	OBSERVATIONS	FINDINGS
Non-traditional Economy		
Average Income	Average income has been rising. From 1997 to 2004, Small Local Communities had 104 percent growth in total employment income.	The trends in Small Local Communities are most likely due to diamond mine development.
Proportion of High-income Earners	The proportion of high- and middle-income families has risen in Small Local Communities. However, the percent of low income families also increased in 2004.	Diamond mine development does not seem to have led to more income differences.
Income Assistance	The case rate did not change in Yellowknife. Rates dropped in Small Local Communities.	After 1997, the drop in cases may be due to better employment, education and income opportunities related to the mining industry. The Yellowknife rate may not have dropped because people without jobs were moving to Yellowknife.
Employment Rate	The employment rate in Yellowknife has not changed much. More people are working for longer periods in Small Local Communities.	Diamond mines played a role in the rise in employment. Greater local access to culturally-fitting education and training has also helped improve education and helped people find a job.
Unemployment Rate	Yellowknife unemployment has not changed. The rate in Small Local Communities continues to drop.	Migration within the NWT can change unemployment rates.
Participation Rate	There is no clear trend in the participation rate.	The lack of trend may be from: changes in the working age population; frustration with the wage economy; obstacles to employment; out-migration.
High School Completion	There is no change in the trend, which was going up before 1996.	The diamond mines have not had a clear impact, either positive or negative, on high school completion.
Less than Grade 9	The percent of the NWT population with less than Grade 9 is dropping, but at a slower rate since 1994.	The drop before 1996 can be explained by grade extensions. Ongoing "Stay in School" plans are making a difference.
Registered Businesses	There has been a small rise in NWT business activity since 1997. Yellowknife saw a decrease. Major spending is continuing to increase in housing, and in transportation and warehousing.	The diamond mines have likely contributed to the rise in business activity. An increase in capital spending indicates an expanding economy.

INDICATOR	OBSERVATIONS	FINDINGS
Net Effect on Government		
Net Effect on Government	The cost of maintaining program and service levels is increasing. Program expectations are also under pressure.	To some extent, this trend is linked to the diamond mining industry. Fiscal arrangements with Canada are also a factor.
Sustainable Development		
Secondary Industry	The cutting and polishing industry continues to grow.	Growth is due to: • Local access to rough diamonds; • GNWT certification programs; • Persistence and marketing by the GNWT, the private sector, and Aboriginal Authorities.

Appendix A
Glossary of Words Used

Capital Expenditures
The gross expenditures on fixed assets for use in the operations of the organization or for lease or rent to others.

Communicable Disease
Any disease that can be transmitted from one person to another. The most common cause is through bodily contact or through germs in the air.

Employment Rate
The percent of persons aged 15 and older who were employed during the reference period. The formula used to calculate the Employment Rate is x/y*100, where x = the number employed and y = the population 15 years & older.

Labour Force
Those people 15 years and older who are working or who are actively looking for work, temporarily laid off and expected to return to work, or have arrangements to start a new job.

Other Criminal Code Crime
This is mischief, prostitution, arson, weapons offences, and other miscellaneous crimes.

Overcrowding (housing indicator)
According to the 2000 NWT Housing Needs Survey, overcrowding is defined as having six or more residents in one house.

Participation Rate
The percent of people, 15 years of age and over, who are in the labour force. The formula used to calculate the Participation Rate is x/y*100, where x = the number in the labour force and y = the population 15 years & older.

Potential Years of Life Lost (PYLL)
PYLL is calculated by assuming that an average life lasts 75 years, and by subtracting the age at which a person dies from 75. For example, a person who died at age 65 would have a PYLL of 10 (75-65 = 10). A person who died at age 20 would have a PYLL of 55. The PYLL for an entire population is the sum of all the years of life lost by those who died before reaching the age of 75.

Property Crime
This includes break and enter, motor vehicle theft, other thefts, possession of stolen goods, and fraud.

Single-parent Families
Single-parent families consist of a parent living in a home with no spouse or common-law partner present, and with at least one child that has never been married.

Social Assistance Annual Payments
The total of all payments of social assistance over a calendar year.

Social Assistance Annual Cases
The total number of people requesting and receiving social assistance for a given year.

Socio-economic[21]
A look at 'socio-economic' impacts includes social, economic, and fiscal impacts. Social impacts can be divided into two types; demographic and socio-cultural.

> **Demographic impacts** — changes in population numbers and characteristics (sex ratio, age structure, migration rates and related service demands);
>
> **Socio-cultural impacts** — changes in social structures, organizations and relationships, and in cultural and value systems such as language or beliefs.
>
> **Economic impacts** — changes in employment, income and business activity.
>
> **Fiscal impacts** — the economic consequences of development for government organizations.

Teen Births
The number of births to persons who are less than 20 years of age.

Unemployed[22]
Refers to persons who, during the week prior to the survey; (i) were without work, had actively looked for work in the previous four weeks and were available for work; or (ii) had been on temporary lay-off and expected to return to their job; or (iii) had definite arrangements to start a new job in the next four weeks.

Unemployment Rate
The percent of the labour force that did not work during the reference period. The formula used to calculate the Unemployment Rate is x/y*100, where x = the number unemployed and y = the number in the labour force.

Violent Crime
These crimes include homicide, attempted murder, assaults, sexual assaults, other sexual offences, robbery, and abduction.

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[21] From "UNEP EIA Training Resource Manual — EIA: Issues, Trends and Practice". R. Bisset, Annex page 8. As found at the following web site: www.ea.gov.au/assessments/eianet/unepmanual/bisset/annex.html.
[22] From "1999 Labour Force Survey" - Northwest Territories Bureau of Statistics.

Appendix B
Company Predictions

The Table below quotes predictions made by BHP, Diavik and De Beers about the possible impacts on the NWT from each of their projects. These statements are quoted from material submitted for the environmental assessment of each project.

COMPANY	STATEMENT

COMMUNITY, FAMILY & INDIVIDUAL WELL-BEING TRENDS

1. Individual Well-being

BHP

"... project employment could aggravate existing social problems by increasing stress and related alcohol abuse, by alienating people from traditional lifestyles and by increasing the pace of change in communities already having difficulty dealing with change."[23]

"Small communities with less wage employment experience, particularly industrial employment, will be more affected by internal factors that determine their ability to handle change...even a half dozen people working directly for the project could increase total community personal income by as much as 15%. The impacts in these communities will be in direct relationship to a community's ability to cope with rotational employment absences and spending of new wage employment dollars."[24]

DE BEERS

De Beers noted that expansion of the wage economy into communities, through the development of the Snap Lake Diamond Project, may exacerbate certain pre-existing dysfunctional conditions in the communities. It clarified this was a reference to substance abuse, drug addiction, suicide rates, teen pregnancy, fetal alcohol effect (FAE) and fetal alcohol syndrome (FAS), sexual abuse, HIV/Aids, and Hepatitis C.[25]

"Job training programs may provide incentives to enrol in substance abuse and alcohol addiction treatment. This, in turn, may have long-lasting physical and mental health benefits to the individual being treated."[26]

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[23] BHP 1995 EIS, page 4.164.
[24] Ibid, page 4.164.
[25] De Beers Response to MVEIRB Information Request No. 1.37, June 2002, page 119.
[26] De Beers EAR, page 5-130.

COMPANY	STATEMENT
DIAVIK	"An inflow of single transient workers, and students involved in rotational employment may bring an element of instability to and affect the human health of the community."[27]
	"Increased disposable income spent on alcohol and drugs may worsen human health conditions of individuals, families and the community."[28]
	"The Diavik Diamonds Project while offering benefits could potentially add to the complexity of human health issues in the communities."[29]

2. Family & Community Well-being

BHP	The EIS talked about indirect impacts of employment "resulting in greater family violence and family breakdown".[30]
	"The 'at work' rotation is well below the length of time at which a measurable deterioration in worker... morale and family relationships begins (21 days)..."[31]
DE BEERS	"Expansion of the wage economy into communities, through the development of the Snap Lake Diamond Project, may exacerbate certain pre-existing dysfunctional conditions in the communities."[32] De Beers clarified this was a reference to, among other things, teen pregnancy. [33]
DIAVIK	"Respecting ... rotation work and associated absenteeism from home, there would likely be a period of personal and family adjustment lasting about two years. Potential effects could include additional demands on family and social services and protection services."[34]

2.1 Single-parent Families

BHP	"Absence from home for two weeks at a time could have an impact on marriages ... Stress caused by a number of factors – need for money, separation, suspected infidelity, are major causes of marriage breakdown. With a rotational work system, marriages are likely to experience some of the stress of separation. At the same time, the availability of jobs may relieve some financial stress." [35]
	"... Rotational shift work ... could create marital pressure for families not used to

[27] Diavik SEER, page 159.
[28] Ibid, page 162-163.
[29] Ibid, page 162.
[30] BHP 1995 EIS, page 4.150.
[31] Ibid, page 4.149.
[32] De Beers EAR, page 5-123.
[33] De Beers Response to MVEIRB Information Request No. 1.37, June 2002, page 119.
[34] Diavik SEER, page 155.
[35] BHP 1995 EIS, page 4.166-4.167.

COMPANY	STATEMENT
	separation. Studies indicate that 68% of the Canadian LDC work force are married (includes non-Aboriginal people as well); however, the number of divorced employees is double that of the general public." [36]
DE BEERS	"...families may break up as the educated or skilled family members go elsewhere to seek employment."[37]
	"There is increased risk of marital and family breakdown associated with stop-overs in Yellowknife as some employees (mostly male) engage in extra-marital affairs." [38]

2.2 Children Receiving Services

BHP	In the 1995 EIS potential effects on human health resulting from identified causes included: "... an increase in social disruption with potential strain on policing and social services ..."[39]
DE BEERS	"Wage employment for an individual may result in a decline in reliance on social services, and a corresponding improvement in family relationships"[40]
	"If many individuals and families are coping poorly with the adjustments, the demands for rigorous and relevant support services will increase. Such support mechanisms may include marital/relationship counselling, child care services"[41]
DIAVIK	"Experience from previous northern projects indicates that new employees with large pay cheques tend to "blow" their money on alcohol first, taper off, and then spend more money and time on the home and family (Chenard 1979). Marriage and family problems caused by alcohol and absenteeism from home are prevalent in the younger generation and would place a short-term demand on counselling and protection services."[42]
	"There would be an initial period of adjustment for employees and families ... During the adjustment period there may be increased demand for protection services."[43]

[36] BHP 1995 EIS, page 4.149.
[37] De Beers EAR, page 5-132.
[38] Ibid, page 5-136.
[39] BHP, 1999 EAR, Section 4.7.11.3 (Socio-economic Effects on Human Health), page 4-196.
[40] De Beers EAR, page 5-26
[41] Ibid, page 5-137.
[42] Diavik SEER, Section 7.4.5.1, Family and Social Services and Infrastructure, Effects.
[43] Ibid, Section 7.4.7.1, Protection and Safety Services and Infrastructure, Effects.

COMPANY STATEMENT

2.3 Family Violence

BHP

There may be "negative impacts of increased income such as alcohol and drug abuse, resulting in greater family violence and family breakdown." [44]

"... social problems existing within the Aboriginal communities may be compounded by an increase in wages. Additional expendable income can lead to alcohol and drug abuse and intensify existing problems such as violence." [45]

DE BEERS

"In family situations where conflict, violence or other domestic problems are already present such issues may be exacerbated by the demands of the rotation schedule, resulting in increased social dysfunction and instability." [46]

"...in families with frequent conflict between spouses, decisions concerning the use of income may exacerbate conflict. Children may also be directly affected as victims of family violence and conflict." [47]

DIAVIK

"...income and absence due to rotational employment may result in... family conflict."[48]

3 Crime

BHP

"If alcohol and drug abuse (and crime that results from these abuses) increase, ... additional law enforcement personnel would be required. ... if the "fast buck" businesses converge on larger centres, particularly Yellowknife, policing agencies may have to deal with more fraud."[49]

"Yellowknife is the most likely centre to experience an increase in drug trafficking. ... Since many NWT residents employed by the project will have to pass through Yellowknife on their way home, there is a possibility that readily available drugs may be purchased and carried to smaller communities." [50]

"... If alcohol consumption increases, crime (particularly assaults) could increase." [51]

"... social problems existing within the Aboriginal communities may be compounded by an increase in wages. Additional expendable income can lead to alcohol and drug

[44] BHP 1995 EIS, page 4.150.
[45] Ibid, page 1.46.
[46] De Beers EAR, page 5-135 – 5-136.
[47] Ibid, page 5-140.
[48] Diavik SEER, Table 32, page 157-158.
[49] BHP 1995 EIS, page 4.166.
[50] Ibid, page 4.167.
[51] Ibid, page 4.165.

COMPANY	STATEMENT
	abuse and intensify existing problems such as violence." [52]
DE BEERS	"As individuals and families try to cope with the lifestyle changes imposed by the rotational work schedule, the social fabric (*i.e.*, relationships and support systems) of communities will be affected. Community members at large may suffer from the effects of friends, extended family, or neighbours resorting to substance abuse or alcoholism when dealing with emotional issues, living in high conflict or violent home situations, or neglecting community and family responsibilities. Social capacity or stability may decrease." [53]
DIAVIK	"Respecting ... rotation work and associated absenteeism from home, there would likely be a period of personal and family adjustment lasting about two years. Potential effects could include additional demands on... protection services." [54]
	"Employment, income, transportation and closure have the potential of affecting local protection services." [55]

4 Housing

BHP	"Regular income can improve the standard of living of both individuals and communities. People with regular incomes can purchase/build their own homes, relieving some of the stress on housing in many communities. They can purchase more goods ... and not only relieve stress of impoverished lifestyle, but circulate their dollars through the local economy to assist in overall improvements in the standard of living." [56]
DE BEERS	"With a consistent monetary income, individuals will have a greater level of security in providing for basic material needs, such as food, housing, or clothing." [57]
DIAVIK	"Employment income and associated economic changes should enable residents of study area communities; [*sic*] particularly the smaller Dene, Metis and Inuit communities to privately purchase or rent houses." [58]

[52] Ibid, page 1.46.
[53] De Beers EAR, page 5-137.
[54] Diavik SEER, page 155.
[55] Ibid, page 149.
[56] BHP 1995 EIS, page 4.168.
[57] De Beers EAR, page 5-138.
[58] Diavik SEER, page 155.

5 Cultural Well-being & Traditional Economy

BHP

The impact of the Project on traditional Aboriginal lifestyle / culture was predicted to be negative but small.[59]

DE BEERS

[for Aboriginal workers] "... impacts are primarily associated with... functioning in a predominantly non-Aboriginal work environment and culture." [60]

"The limited amount of time in the community may limit individuals' ability to pursue Aboriginal traditional activities, which impacts on individuals' lifestyle and the maintenance of a cultural identity." [61]

"The family as a whole will also be affected by the limited time available to engage in traditional activities with all family members present. This may complicate efforts to maintain cultural traditions and identity."[62]

"It is not possible to predict with reasonable certainty whether individual and community involvement mining activities will negatively or positively impact on the subsistence economy in communities."[63]

DIAVIK

"... the context for expression important to the survival of Aboriginal languages could change." [64]

"Employment at the minesite in an English only environment may pose a risk to Aboriginal Languages. The presence of other Aboriginal language speakers at the minesite and the opportunity for Aboriginal workers to reside in their home communities may reduce this risk." [65]

"...wage based activities may erode... Dene, Metis and Inuit culture" [66]

"Out-migration from smaller Aboriginal communities affect[s] community organization and weaken[s] culture." [67]

[59] BHP 1995 EIS, Table 4.2 and Table 4.4
[60] De Beers EAR, page 5-127.
[61] De Beers EAR, page 5-134.
[62] Ibid, page 5-135.
[63] De Beers Canada Mining Inc. Conformity Response, page 27, August 2002.
[64] Diavik SEER, Vol. 7.5.4.1.
[65] Ibid, Vol. 7.5.4.1.
[66] Diavik SEER, Table 32, page 157-158, 96.
[67] Diavik SEER, Table 32, page 157-158, 96.

"Industrial work may erode traditional harvesting practices." [68]

"Possible in-migration of job seekers to Yellowknife may change... harvesting patterns... Conflicts resulting from increasing competition for land and resources may alienate traditional land users from important harvesting activities." [69]

"The renewable resource economy of study area communities should benefit from the proposed Project as more harvesters would have money to purchase equipment and supplies needed for harvesting activities." [70]

NON-TRADITIONAL ECONOMY

6 Income & Employment

6.1 Average Income

BHP

"Project-generated employment could increase NWT wage income by 3% per year during the construction phase and 5% per year during the operations phase assuming 1995 employment levels. Aboriginal communities and Coppermine could experience substantial increases in earned income in both the construction and operations phase." [71]

"The project could also cause an increase of total earned income in these [Aboriginal] communities by over 33%." [72]

"Induced employment from household responding of NWT Diamonds Project direct and indirect employment dollars could generate an additional 155 jobs in the Northwest Territories. Annual income for these jobs will be approximately $5 million." [73]

DE BEERS

"Job opportunities will largely accrue to the primary communities with the result being changes in the economic circumstance of many families of those communities as well as the communities themselves." [74]

During Construction, "Total labour income impact for the NWT is estimated at some $102.0 million." [75]

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[68] Ibid, Table 32, page 157-158
[69] Ibid, page 159.
[70] Ibid, page 155.
[71] BHP 1995 EIS, page 4.111.
[72] Ibid, page 4.132.
[73] Ibid, page 4.102.
[74] De Beers 2002 EAR, page 5-104.
[75] De Beers 2002 EAR, page 5-115.

"Annual labour income impacts for the NWT during the operations phase are estimated at some $81.2 million."[76]

DIAVIK "Employment and income effects associated with the proposed Project are positive, long lasting, and complementary to northern and Aboriginal aspirations and needs." [77]

"The construction phase is ... projected to increase labour income in the NWT by $182 million (all values are presented in constant 1997 dollars). ... The operation of the proposed Project will also increase labour income in the local study area by $27 million ..."[78]

6.2 Proportion of High-income Earners

BHP "In smaller communities, mine wage employment could widen the gap between 'haves' and 'have nots' in the community." [79]

DE BEERS "In communities where employment opportunities remain limited to those created by the Snap Lake Diamond Project, community divisions and fractions may arise between 'have' and 'have-nots', which may exacerbate other social problems in the community." [80]

DIAVIK "Project workers of Aboriginal ancestry seeking residency in Yellowknife, N'dilo and Dettah may be more affluent than other Aboriginal people. In small communities such as N'dilo and Dettah this situation could increase the gap between the 'have' and 'have nots' resulting in stresses to interpersonal and family relationships." [81]

6.3 Income Assistance Cases

BHP "In the study area .... Assuming that 400 people would no longer need social assistance, this could mean a $1.4 million annual savings..." [82]

DE BEERS "As the household income level is increased for families reliant on welfare, the family will no longer be eligible for welfare assistance." [83]

DIAVIK "Other benefits of the proposed Project would include ... a fall in social assistance ... payments as more NWT residents gain employment." [84]

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[76] Ibid, page 5-116.
[77] Diavik SEER, Vol. 7.1.
[78] Diavik 1998 SEER, Executive Summary, Predicted Impacts in the NWT.
[79] BHP 1995 EIS, page 4.166.
[80] De Beers EAR, page 5-128, Table 5.3-7.
[81] Diavik SEER, Section 7.5.1.1.
[82] BHP 1995 EIS, page 4.183.
[83] De Beers EAR, page 5-140.
[84] Diavik SEER, Section 7.2.7.3, Operating Phase Impacts in the Local Study Area.

6.4 Employment Rate

BHP "... the NWT Diamonds Project will have a significant impact on... communities that... fail to benefit from other major industries... While Yellowknife... will be a major beneficiary... of new jobs, the smaller First Nations communities, as well as Coppermine and Hay River, can also expect significant employment benefits." [85]

DE BEERS "... the Project will create 450 construction jobs and in excess of 500 jobs during the operation of the mine facility. Job opportunities will largely accrue to the primary communities..." [86]

DIAVIK "Cumulative employment and income effects associated with the proposed Project would be positive, long lasting, and complementary to northern and Aboriginal aspirations and needs and should address one of the most pressing issues in the study area communities – lack of employment and business opportunities." [87]

6.5 Unemployment Rate

BHP "Hiring by the project is expected to reduce unemployment in Aboriginal communities from almost 40% to 30%." [88]

DE BEERS "Through the creation of direct, indirect and induced employment opportunities, it is expected that the rates of unemployment will be reduced in Yellowknife, other primary study communities and the employment catchment communities."[89]

DIAVIK "The proposed Project would ... contribute to a reduction in unemployment..."[90]

6.6 Participation Rate

BHP Neither BHP nor De Beers referred to the participation rate. However, statements on
DE BEERS employment and unemployment imply the participation rate would increase.

DIAVIK "The proposed Project would ... contribute to ... an increase in participation rates." [91]

7 Education

BHP "Employment possibilities with the NWT Diamonds Project can provide an incentive for

[85] BHP 1995 EIS, Vol. 1.
[86] De Beers EAR, page 5-104.
[87] Diavik SEER, Vol. 7.6.
[88] BHP 1995 EIS, page 4.132.
[89] June 2002 MVEIRB Information Request No. 1, Response 1.27(c), page 100.
[90] Diavik SEER, Section 7.3.
[91] Diavik SEER, Section 7.3.

people to stay in school, if only to attain the education level required for apprenticeship positions." [92]

"Government, community and Proponent sponsored "stay in school" programs will encourage more young people to complete at least Grade 10."[93]

DE BEERS "The opportunity for future wage employment may also motivate unqualified individuals to upgrade their educational level and general life skills to meet project standards for employment eligibility." [94]

"It is possible too, that individuals participating in training or educational programs will inspire other family members to improve their educational level or join in various skills development programs." [95]

"The achievement of a certain level of education and skills may, in the longer run, spur demands for further education and training programs..." [96]

DIAVIK "Diavik initiatives would contribute to the development of able and skilled employees, the support and encouragement of future employees, and the reduction of employment barriers. Through proposed education and training initiatives, opportunities for all northerners would increase..." [97]

8 Business

BHP " ... exploration activity has allowed businesses to start the expansion required to adequately service an expanded northern mining industry, and has added to the local supply of service and retail operations... Positive impacts far outweigh negative impacts in Yellowknife, since a project such as the NWT Diamonds Project is needed if Yellowknife is to continue to grow and prosper." [98]

"On the economic side, the impacts [for First Nations Communities] would be positive. Increased dollars in the economy could foster the expansion of existing businesses or the start-up of new businesses, particularly in the retail and personal services area. In turn this could generate more employment and wage income." [99]

DE BEERS "If financial and human resources are spent in the community to provide basic education and skills training, but no support is provided to use these skills for local business

[92] BHP 1995 EIS, page 4.180.
[93] Ibid, page 4.86-4.88.
[94] De Beers EAR, page 5-129.
[95] Ibid, page 5-131.
[96] Ibid, page 5-133.
[97] Diavik SEER, page 136.
[98] BHP 1995 EIS, page 4.127.
[99] Ibid, page. 4.133.

initiatives... economic development at the community level will not occur." [100]

"Given that the mine is a major development project, it is expected to be a catalyst for benefiting Aboriginal and northern business."[101]

DIAVIK "Tourism services and infrastructure may improve and expand, particularly in the smaller Dene, Metis and Inuit study area communities..." [102]

"... initiatives could result in the expansion of existing businesses, the creation of new businesses..." [103]

"Use of the rail system to transport goods and fuel will have a positive affect... its continued use would enhance Hay River and Enterprise as northern gateway communities." [104]

"Anticipated increases in economic activity should stimulate local economies and support their development." [105]

NET EFFECT ON GOVERNMENT

9 Net Effect on Government

BHP "Annual costs to the federal and territorial governments due mainly to the 1,000 people moving to the NWT as a result of the NWT Diamonds Project are expected to be $4 million and $10 million, respectively. Offsetting these costs is a potential $3 million annual savings in social assistance and subsidy payments as a result of increased employment..." [106]

DE BEERS "If many individuals and families are coping poorly with the adjustments, the demands for rigorous and relevant support services will increase." [107]

DIAVIK "Other benefits of the proposed Project would include a reduction in government expenditures due to a fall in social assistance and unemployment payments." [108]

[100] De Beers EAR, page 5-133.
[101] Ibid, page 5-104.
[102] Diavik SEER, page 156.
[103] Ibid, Vol. 7.3.9.1.
[104] Ibid, page 153.
[105] Ibid, page 154.
[106] BHP 1995 EIS, page 4.182.
[107] De Beers EAR, page 5-137.
[108] Diavik SEER, page 116.

SUSTAINABLE DEVELOPMENT

10 Secondary Industry

BHP "... final cleaning and sorting of rough diamonds ... is most likely to be Antwerp in Belgium" [109]

DE BEERS During the environmental assessment of the De Beers Snap Lake Project, De Beers indicated that it would support GNWT efforts to develop secondary industry.[110]

[109] BHP 1995 EIS, page 1.10.
[110] MVEIRB Technical Sessions for Debeers Snap Lake Diamond Project, 2003.

Appendix C
History of Events

BHP, Diavik and De Beers predicted their Projects may affect NWT communities. Other events can also have an effect. In addition, major changes in programs, such as changes in legislation, can affect the trends we see.

The Chart below documents the timing of

- major workforce shocks felt in the NWT, and
- major programs changes.

This is included as an aid to interpreting the trends in this Report.

A fuller picture of events can be seen by also looking at the SEA reports on employment and spending that each company issues.

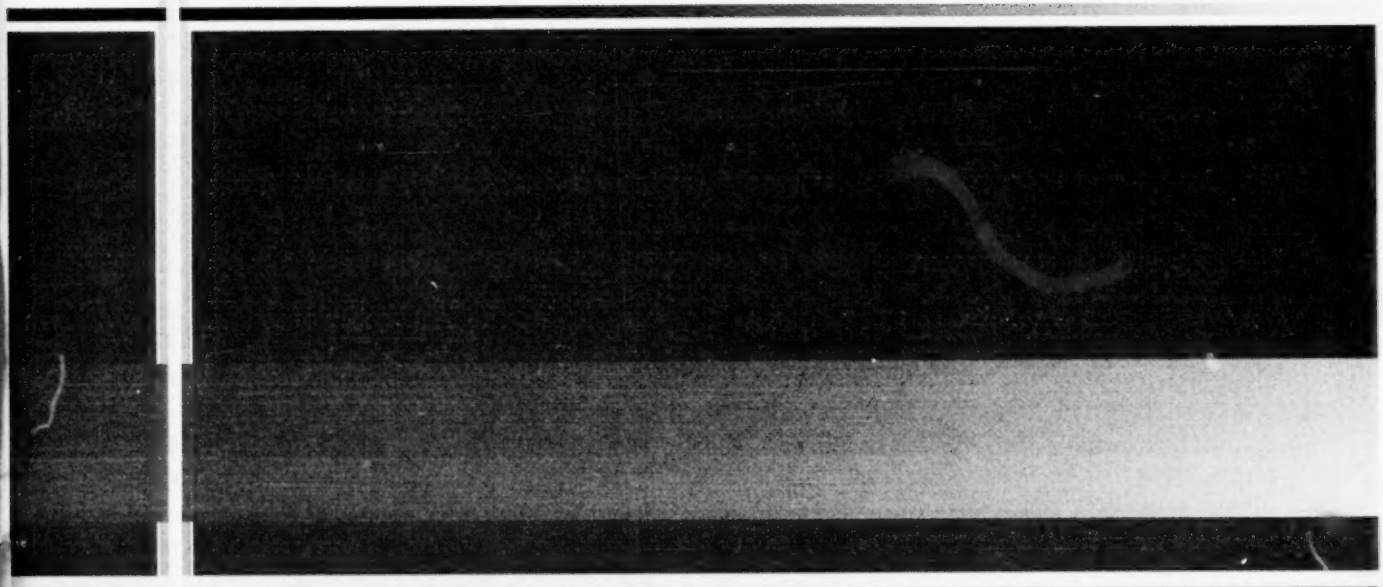
DATE	INDUSTRIAL, SOCIAL & POLITICAL EVENTS
1997	Royal Oak Mines Giant Mine lays off about 40 workers.
	Miramar Con Mine lays off about 120 workers.
1997 to 2003	Licenses issued for oil and gas exploration. This started with the Sahtu in 1997, then Fort Liard and the Beaufort Delta. The size of rights issued increases as each new area is opened for exploration.
January 1997	Ekati Mine construction begins.
December 1997	Royal Oak Mines Colomac Mine closes.
January 1998	Lupin Mine (Nunavut) enters care and maintenance status, laying off about 500 workers.
May 1998	Miramar Con Mine halts operations during a labour strike.
October 1998	Ekati Mine begins commercial operations.
October 1998	NWT *Child and Family Services Act* comes into effect.
February 1999	BHP Sorting and Valuation Facility opens in Yellowknife.
April 1999	Territory of Nunavut established; NWT public sector becomes smaller.
June 1999	Sirius Diamonds opens a cutting and polishing facility in Yellowknife.

DATE	INDUSTRIAL, SOCIAL & POLITICAL EVENTS
July 1999	Miramar Con Mine labour strike ends and operations resume.
2000	Giant Mine operations begin again on a smaller scale, with less than 100 employees.
March 2000	Deton'Cho Diamonds opens cutting and polishing facility in Yellowknife.
April 2000	Lupin Mine operations begin again with a smaller workforce.
December 2000	Diavik construction begins.
	Arslanian Cutting Works opens a cutting and polishing facility in Yellowknife.
2002	Tiffany and Co. begin construction of a cutting and polishing facility in Yellowknife
2003	Tiffany & Co. opens a cutting and polishing facility in Yellowknife under the name Laurelton Diamonds.
January 2003	Diavik Mine starts production.
April 2003	Federal *Youth Criminal Justice Act* comes into effect.
August 2003	Operations suspended at Lupin Mine (Nunavut), affecting about 305 employees.
November 2003	Miramar closes Con Mine.
April 2004	NWT *Youth Justice Act* comes into effect.
February 2005	De Beers begins construction of Snap Lake Diamond Mine
April 2005	NWT *Protection Against Family Violence Act* comes into effect.
August 2005	Tlicho Land Claim and Self-Government Agreement effective date.

Appendix D
Data Tables

Appendix D, Data Tables, is attached as a CD computer disk.

The Government of the Northwest Territories takes no responsibility
for financial losses suffered as a result of reliance on the information in this report.



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